



# **Support study for an impact assessment for the revision of the social legislation in road transport**

Final report

Study contract no. MOVE/D3/2016-605



Authors : Gena Gibson, Achilleas Tsamis, Edina Lohr, Elena Guidorzi, Samuel Levin

May - 2017

**EUROPEAN COMMISSION**

Directorate-General for Mobility and Transport  
Directorate C – Land  
Unit C1 – Road transport

*Contact: Ewa Ptaszynska*

*E-mail: Ewa.PTASZYNSKA@ec.europa.eu*

*European Commission  
B-1049 Brussels*

# **Support study for an impact assessment for the revision of the social legislation in road transport**

Final report

***Study contract no. MOVE/D3/2016-605***

***Europe Direct is a service to help you find answers  
to your questions about the European Union.***

**Freephone number (\*):**

**00 800 6 7 8 9 10 11**

(\*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

#### **LEGAL NOTICE**

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<http://www.europa.eu>).

Luxembourg: Publications Office of the European Union, 2014

ISBN [number]

doi:[number]

© European Union, 2014

Reproduction is authorised provided the source is acknowledged.

*Printed in [Country]*

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)

PRINTED ON TOTALLY CHLORINE-FREE BLEACHED PAPER (TCF)

PRINTED ON RECYCLED PAPER

PRINTED ON PROCESS CHLORINE-FREE RECYCLED PAPER (PCF)

Image(s) © [artist's name + image #], Year. Source: [Fotolia.com] (unless otherwise specified)

## Table of Contents

EXECUTIVE SUMMARY .....	7
SYNTHÈSE .....	16
1. INTRODUCTION AND OVERVIEW .....	27
2. POLICY OBJECTIVES .....	27
3. POLICY OPTIONS .....	27
3.1. Retained policy measures .....	28
3.2. Discarded policy measures.....	29
3.3. Identification of policy packages .....	31
4. METHOD/PROCESS FOLLOWED .....	34
4.1. Desk research and data collection.....	34
4.2. Analysis of inputs from the open public consultation .....	34
4.3. SME Panel .....	36
4.4. Targeted stakeholders surveys .....	36
4.4.1. Survey of Drivers .....	36
4.4.2. Survey of National Authorities .....	38
4.5. Direct information requests.....	39
4.6. Interviews .....	40
4.6.1. Exploratory interviews .....	40
4.6.2. Stakeholder interviews .....	40
4.7. Study visits.....	41
4.8. Research limitations – robustness of findings .....	41
5. BASELINE SCENARIO .....	42
5.1. Market context .....	42
5.2. Assumed evolution of main problem drivers .....	42
5.3. Analysis of the evolution of key problem variables in the baseline.....	44
5.3.1. Levels of compliance .....	44
5.3.2. Use of dubious/illicit business and employment schemes .....	49
5.3.3. Periods away from home.....	50
5.3.4. Levels of fatigue and risk .....	54
5.3.5. Regulatory costs and savings.....	58
6. ANALYSIS OF IMPACTS .....	77
6.1. Social impacts .....	77
6.1.1. Impact on compliance with EU social rules .....	77
6.1.2. Impacts on periods away from home/base .....	99
6.1.3. Impacts on fatigue and stress.....	109
6.1.4. Impacts on road safety and occupational health.....	118
6.1.5. Impacts on working conditions .....	125
6.1.6. Impacts on employment levels and types of work contract .....	130
6.1.7. Impacts on the principle of non-discrimination, equal treatment and equal opportunities .....	138
6.2. Economic impacts .....	142

6.2.1.	Impacts on businesses (operational, compliance and administrative costs) .....	142
6.2.2.	Impacts on costs for authorities .....	164
6.2.1.	Impact on SMEs.....	174
6.2.2.	Impact on functioning of the internal market and competition .....	179
7.	COMPARISON OF OPTIONS .....	184
7.1.	Effectiveness and efficiency .....	184
7.2.	Coherence .....	188
8.	PREFERRED OPTION .....	190
9.	REFERENCES .....	192
10.	GLOSSARY .....	195

## **ANNEXES**

Annex A Problem definition

Annex B Screening of policy options

Annex C Analysis of interactions with social measures

Annex D Assessing impact on level of fatigue and road safety

Annex E SME test

Annex F Stakeholder consultation summary report

Annex G Stakeholder engagement tools

## EXECUTIVE SUMMARY

### *A. Purpose and scope of the study*

Social legislation in road transport has been introduced in order to achieve the following objectives:

- To ensure a level playing field for drivers and operators;
- To improve and harmonise working conditions; and
- To improve the level of road safety.

It is composed of the following legislative acts:

- Regulation 561/2006 that establishes requirements related to daily and weekly driving times, break and rest periods and sets the principles for uniform application of the rules;
- Directive 2002/15/EC that lays down the rules for the organisation of the working of persons performing mobile road transport activities; and
- Directive 2006/22/EC that sets out requirements for the enforcement of Regulation 561/2006.

In addition, in the case of the cross-border provision of road transport services, the rules of the Posting of Workers Directive 96/71/EC also apply, as well as those of the enforcement Directive 2014/67/EC.

Following an Ex-post Evaluation of the social legislation, the Commission identified a number of problems that include:

- Low levels of compliance with the legislation;
- Significant regulatory burden as a result of the differences between Member States in the implementation of the legislation; and
- High level of stress and fatigue of drivers.

The Commission has found that the rules of the cross-sectorial Posting of Workers Directive raise legal questions and practical difficulties in their implementation in the highly mobile road transport sector. The unilateral measures adopted by certain Member States on the application of their minimum wage to foreign operators and drivers in the context of posting do not ensure the balance between the social protection of workers and the freedom to provide cross-border services, which is the main goal of the Posting of Workers Directive. Thus, the Commission considered it appropriate to assess the issues of posting of workers in international transport.

This study aims to support the Impact Assessment for the revision of the legislative framework of the social rules in road transport, including the rules on posting of workers.

### *B. Policy options analysed*

A number of policy measures were identified to address the underlying root causes and drivers of the problems. They were grouped into four Policy packages:

- **Policy package 1 – Clarification of the legal framework & improve cooperation:** Included measures aiming to clarify existing ambiguities without substantially changing the rules, as well as measures to improve cooperation among enforcement authorities, that are not expected to have significant costs impacts.
- **Policy package 2 – Strengthening of enforcement and changes to obligations:** Included measures intended to strengthen enforcement (e.g. access to risk-rating systems in real time, minimum number of checks for

controlling compliance with working time provisions) that were expected to involve more significant regulatory costs. It also included measures introducing changes to the existing obligations of operators and drivers in relation to weekly rest (e.g. changes to the approach of calculating the regular weekly rest, forbidding spending regular weekly rest in vehicles, reduce the reference period for calculation of the maximum average weekly working time). However, this policy package does not significantly change the overall framework of the rules.

- **Policy package 3 – Targeted revisions of the social legislation:** Included significant changes to current provisions (e.g. forbidding performance-based pay) and added derogations for occasional passenger transport activities. It also included changes to enforcement and monitoring, in order to support the transition.
- **Policy package 4 – Revisions to the PWD:** This Package is a horizontal policy option (i.e. it could be combined with any of Policy Packages 1-3) and included measures for transport-specific rules on posting (i.e. setting three alternative time-thresholds for the application of certain aspects of the posting rules, 5 days (PP4a), 7 days (PP4b), 9 days (PP4c)) and including sector-tailored administrative and enforcement requirements.

### ***C. Method and process followed***

The analysis included an assessment of the economic and social impacts of the proposed measures against the baseline scenario. The following research tools were used:

- Desk research and data collection to identify, extract and analyse secondary data sources from relevant studies, reports and databases. This was used for the development of the baseline and the quantification of impacts of the proposed measures.
- An open public consultation organised by the Commission, where a total of 1,378 responses were collected: 169 for the specialised questionnaire, and 1,209 for the non-specialised questionnaire.
- Three surveys, including a survey of national authorities (41 responses), a survey of drivers (345 responses) and an SME panel survey (109 responses).
- A data request to transport operators (73 responses).
- A total of 40 interviews with selected stakeholders covering national authorities responsible for implementation and enforcement of the legislation, industry representatives (at EU and national level), individual transport operators and trade union representatives.
- Two study visits: one with the enforcement authorities in the Netherlands and the second with an undertaking in France. These were to explore the practical aspects (e.g. time required to enforce the suggested measures) and economic impacts (e.g. costs of introducing the proposed measures) relating to the policy measures.

### ***D. Analysis of impacts***

#### ***D.1 Effectiveness and efficiency of policy options***

The policy options were analysed and assessed in comparison to the baseline in relation to:

- The effectiveness in terms of achieving key objectives which included:
  - To contribute to the higher compliance with the existing rules;
  - To contribute to reduction of stress and fatigue of drivers;

- To contribute to the reduction of the regulatory burden to businesses and Member States;
- Their efficiency (costs/savings) in comparison to the baseline scenario.

In addition, in the context of the applicability of the provisions on posting of workers, the policy packages were also assessed against the criterion of:

- Balance between social protection of workers and freedom to provide cross-border services, due to the cross-cutting goal of the legal framework.

The results are summarised in Table 0-1.

**Table 0-1: Comparison of impacts of policy packages in terms of objectives (in comparison to baseline)**

Strongly negative		Weakly negative		No or limited impact	Weakly positive	Strongly positive
	Traditional social measures					Posting of workers
Impacts	PP1	PP2	PP3	PP4 (5/7/9 days threshold)		
Effectiveness						
Contribute to higher compliance with the existing rules						
Expected improvement of the compliance level with EU social rules	Very limited positive impact on levels of compliance on the basis of increased clarity and some improvements of enforcement.	Small increase in compliance levels as a result of the overall improvement of enforcement and increased clarity of legal framework from proposed measures.	Positive impact from PP2 measures further strengthened by positive role of forbidding performance based payments and simplification of 12-day derogation for international transport.	Unclear impact. Positive impact from significant simplification of rules/procedures. Significant questions on capacity to effectively monitor period spent in a host country and enforce compliance – higher threshold 9 less demanding due to reduced scope.		
Contribute to reduction of stress and fatigue of drivers						
Expected improvements in length of periods away from home	No or Small negative impact (increase) on periods away from home by allowing spending regular rest in vehicles in some Member States.	Significant positive impact on periods spent away from home – 43% increase to the number of drivers that spend weekly rest at home for EU13 drivers and 16% for EU15.	Positive impact for most drivers due to measures of PP2. Some negative impact for coach drivers from adopting 8/12 day derogation of domestic passenger transport.	Some increase in periods away from home for drivers from EU13 (lower cost countries) due to reduction of costs for posting and threshold periods. Very small increase in average period away from with increasing threshold from 5 to 7 and 9 days.		
Expected improvement of driver's fatigue and stress levels	Positive impact due to reduction of stress (clearer rules, more possibility to reach home base and higher minimum standards of accommodation).	Decreases in fatigue levels (-30%) over 4 week period from combined changes to calculation of average weekly rest and average working time. Longer term decrease of 14-16% from change in calculation of average working time Improvements in stress and fatigue due to clearer legal framework, higher standard of accommodation that is also paid for, and improved possibilities to spend rest at home/base.	Decreases in fatigue of up to (-30%) for drivers in freight from PP2 but overall expected increase in fatigue index of 8% for international coach drivers, and of 20 to 33% for domestic coach drivers as a result of the proposed derogations.	Negative impact on fatigue and stress due to increase in periods away from home.		
Expected improvement of road safety and occupational health	Small positive impacts on fatigue due to more responsible driving and possibility to reach home base in case of exceptional circumstances.	Significant positive impact on risk index due to combined effect of measures concerning calculation average weekly rest and reference	Slight positive additional impact for freight drivers due to lower incentives from performance-based pay to break rules.	Minor and indirect negative impact due to small increase in fatigue.		

Impacts	Traditional social measures			Posting of workers
	PP1	PP2	PP3	PP4 (5/7/9 days threshold)
		period for working time (decrease by 24%) with additional positive impact from measures on expected from forbid spending the regular weekly rest in the vehicle and oblige employer to either provide or pay for adequate accommodation and changes to breaks.	Increase in risk – in comparison to PP2 - of 4% for international passenger transport coach drivers and 4-5% for domestic coach drivers subject to the derogations.	
<b>Expected improvement in working conditions</b>	Small positive impact due to reductions in fatigue/stress.	Significant positive impacts due to significant reductions in fatigue/stress and reductions in periods away from home.	Strong positive impacts due to reductions in fatigue and periods away from home, although these are lower for affected coach drivers and, potentially, where drivers suffer from lower wages if they are not compensated for changes to performance-based payment rules.	Small negative impacts overall due to increases in periods away from home and possible. Reductions in wages compared to the baseline for EU-13 drivers operating in the countries that previously had minimum wage laws.
<b>Impact on employment and levels and types of work contract</b>	Minor positive impact due to improved working conditions.	Overall positive impact on levels of employment due to expected major increases in supply of drivers (more attractive) with only minor increase in demand.	Positive impact from measures of PP2 are only partly counterbalanced by negative impacts for coach drivers affected by the measures.	Overall, uncertain impact due to diverging type of impacts on both demand and supply side.
<b>Efficiency</b>				
<b>Reduce administrative burdens for national authorities and transport undertakings</b>				
<b>Compliance and administrative costs for businesses</b>	Very limited net impact expected	Small additional costs expected for operators that allow or promote spending weekly rest on vehicles and administrative costs from additional working time checks and reduced flexibility from 4 week reference period.	Additional costs from PP2 measures counterbalanced for passenger transport operators from derogations sector.	Significant reductions in administrative and compliance costs. Reductions in compliance costs range from 58% (5 day threshold) to 79% (9 day threshold). Reductions in administrative costs across the EU are 53%.
<b>Costs for authorities for implementation and enforcement</b>	Limited additional costs mainly relate to additional time/staff requirements for responding to information requests from other Member States in relation to enhanced administrative cooperation.	Additional costs to authorities related to additional time/staff requirements for increased number of working time checks and reporting templated and requirements for new equipment/software for access to risk rating system.	Cost increases – in addition to PP2 - due to more time-consuming enforcement for domestic coach derogations.	Overall decrease in the scope and, most probably, costs of enforcement but with different impact in Member States with and without existing minimum wage rules.

In the case of **Policy Package 1**, a positive contribution should be expected in relation to the drivers' fatigue and stress, as well as occupational health and safety due to expected higher standard of accommodation and the increased possibility to reach home. However, only limited impacts are expected on the level of compliance with the rules due to increased clarity and some improvements in enforcement. The voluntary nature of the other measures is expected to limit their effectiveness. From the point of view of costs, there are no significant impacts expected for either businesses or authorities. Overall, while PP1 has limited costs, the voluntary nature of most measures means that it also has limited effectiveness.

In the case of **Policy Package 2**, a strong positive contribution is expected in relation to the level of stress and fatigue of drivers as a result of reductions to the periods spent away from home (expected 43% reduction for EU-13 and 16% for EU-15), together with a decrease in fatigue levels (decrease in the fatigue index of 30%). Similarly, a significant positive impact on the level of risk is expected (decrease of 24% in the risk index). At the same time, the measures under PP2 are expected to lead to some improvement in compliance with the legislation, as a result of the overall improvement of enforcement through and increased clarity of legal framework from proposed measures.

While difficult to quantify, the cost implications for operators are expected to be small - mainly linked to the provision of accommodation, additional working time checks and reduced flexibility from the 4 week reference period.

Additional costs to authorities are also expected to be limited - mainly related to additional time/staff requirements for increased number of working time checks and reporting templated and requirements for new equipment/software for access to risk-rating systems.

In the case of **Policy Package 3**, a stronger positive impact on levels of compliance is expected compared to PP2 due to the forbidding of performance based payments and simplification of the 12-day derogation for international transport. However, in terms of levels of stress and fatigue, PP3 is expected to have less positive impacts than PP2. Adopting an 8 or 12 day derogation for domestic passenger transport is expected to have negative impacts on affected drivers in terms of increased periods away from home, fatigue and risk. The above should also lead to slightly less positive overall impacts of PP3 in terms of working conditions for passenger transport, but also a less positive impact on the supply of drivers and on employment levels. In terms of costs of the proposed measures, the derogations should be expected to reduce the costs to some operators in comparison to PP2. From the point of view of authorities, the costs should be slightly higher than in PP2 due to more time-consuming enforcement for domestic coach derogations.

Overall, PP3 appears to be less effective in comparison to PP2, while it is expected to have largely similar costs.

Finally, concerning **Policy Package 4 (a/b/c)**, increases in periods away from home for drivers from EU-13 (lower cost countries) should be expected due to the reduction in costs for posting. This should also have a negative impact on fatigue and to a lesser extent on road safety. A small negative impact on working conditions is also expected due to increases in periods away from home and possible reductions in wages compared to the baseline for EU-13 drivers operating in the countries that previously had minimum wage laws. Among the three scenarios, a smaller threshold (5 days) means reduced periods away from home and also reduced impact on working conditions and health and safety. However, the actual difference among the thresholds considered is very limited. What is unclear is the impact of the proposed measure on compliance. A positive impact from significant simplification of rules/procedures should be expected, but there are also important questions on the capacity to effectively monitor the period spent in a host country and enforce compliance.

In terms of the costs of PP4, significant cost reductions in both administrative and compliance costs for operators should be expected. Expected reductions in compliance costs from PP4 in comparison with the current wage rules – as they apply in four Member States (Germany, France, Austria and Italy) and as are expected to apply in Belgium, Denmark, Luxembourg and Sweden - range from 58% in the case of a 5 day threshold (€190 million/year) to 79% in the case of a 9 day threshold (€605 million/year). Most of the costs savings (97%), are expected to arise for EU13 operators. At the same time, expected reductions in administrative costs across the EU are 53% (€605/year), with most of the savings (82%) expected to arise for EU15 operators.

In terms of the costs to authorities, an overall decrease in the scope (number of trips covered) is also expected to lead to overall decrease in enforcement costs. However, this impact will differ across Member States. PP4 will bring significant decreases to the scope for the Member States that apply wage rules and should also lead to reduced enforcement costs. Conversely, all other Member States will see a certain increase in enforcement costs. At EU-28 level, a 9 day threshold will reduce the scope by 78%, a 7 day threshold by 70% and a 5 days threshold by 58%.

## ***D.2 Coherence of policy options***

There are no specific issues regarding **internal coherence**, inconsistencies or gaps among the policy packages, which were designed in a way to ensure that all root causes and drivers are addressed. This is particularly the case for **PP2**, **PP3** and the horizontal **PP4**, which include mandatory measures that are expected to work in a complementary manner to strengthen effectiveness of enforcement by increasing consistency, improving communication, cooperation and increasing legal clarity. This is probably less the case for **PP1**, which includes voluntary measures that may not be adopted by all Member States and thus, in practice, only partly address some of the problems identified. **PP4** as regards the application of posting of workers rules to road transport is coherent with the other measures that address the traditional road transport social rules.

As regards **coherence with key EU policy objectives**, the impacts on the principle of non-discrimination and equal opportunities, impact on the functioning of the internal market and impact on SMEs were examined.

In total, while no package has overall negative impacts, the analysis suggests that **PP2** and **PP3** together with **PP4** perform better than **PP1**, which is expected to have a less positive impact as it is a voluntary measure.

**PP2** together with **PP4 (a/b/c)** is expected to have a better impact on coherence. It would have an impact on working conditions and also how operators and drivers can organise the work in a more flexible manner without infringing the rules. **PP3 (+PP4)** is estimated to have a similar impact on coherence as **PP2 (+ PP4)**. In relation to the impact on SMEs, PP4 is expected to have positive impacts and partly offsets the negative impacts from PP2.

As regards **coherence with other relevant EU legislation**, a number of measures under consideration have synergies in terms of reducing distortions of competition, ensuring better protection of rights of workers, enhancing road safety and overall improving administrative cooperation and consistency and effectiveness of cross-border enforcement with better use of digital tools and data exchange systems.

The main conclusions of the analysis on coherence are summarised in the Table 0-2.

**Table 0-2: Comparison of impacts of policy packages in terms of coherence**

Strongly negative	Weakly negative	No or limited impact	Weakly positive	Strongly positive
	Traditional social measures			Posting of workers
Impacts	PP1	PP2	PP3	PP4 (5/7/9 days threshold)
Internal coherence				
Internal coherence	No coherence issues but more difficult to ensure all measures are implemented	No coherence issues	No coherence issues	No coherence issues
Coherence with key EU policy objectives				
Impact on the principle of non-discrimination and equal opportunities	Insignificant contribution to ensuring equal treatment at the EU level. This will be proportional to Member States voluntarily applying EU recommended uniform schemes for enforcement	Positive impact on reducing and preventing discriminatory enforcement practices across different Member States	In addition to PP2, overall positive impact on equal treatment of international and domestic coach drivers, as well as reducing inconsistencies in payment schemes	Potentially positive impact due to the introduction of clearer and more proportionate posting of workers provisions, although uncertain the extent to which it would equally benefit drivers across different Member States and within the same company
Impact on the functioning of the transport market and competition	Limited positive impact on improving the functioning of the internal market and fairer competition between operators	Positive impact in terms of addressing the identified regulatory failure and contribute tackling unfair competition between undertakings across different Member States	Positive impact on functioning of internal market and fair competition by a range of measures that, put, together, reduce non-compliance and use of illicit/dubious business and employment models	Uncertain impact on ensuring a level playing field and on helping addressing regulatory failure
Impact on SMEs	Small negative impacts from increased administrative burden and different rules across EU on performance based pay probably counterbalanced by increased flexibility from allowing spending weekly rest in vehicle	Negative impact from flexibility from reduced working time reference period, partly offset by small positive impacts from increase in flexibility from break time changes and attestation forms	Further negative impacts from forbidding spending weekly rest in the vehicle. Small positive impact from flexibility for passenger transport and forbidding of performance-based pay	Positive impact for most SMEs by reducing the administrative costs for the majority of operations
Coherence with other relevant EU legislation				
Coherence with other relevant EU legislation	Limited contribution due to voluntary nature of most measures considered	Strengthening of enforcement and compliance with social rules contributing also to compliance with rules on access to market	Strengthening of enforcement and compliance with social rules contributing also to compliance with rules on access to market	Positive role of broader adoption of posting rules towards reducing letterbox companies and fake establishments

### ***E. Preferred policy option***

Overall, the preferred policy option should be a combination of **PP2 and PP4b**

As regards the traditional road transport social measures, **PP2** is expected to strengthen the enforcement and clarify the legal framework. It should provide the most positive impacts in terms of reduction of stress and fatigue of drivers, without negative impacts on road safety and occupational social health conditions. It should also deliver similar reductions in administrative burdens for national authorities and transport undertakings. In comparison, PP3 appears to have a more negative impact in relation to social conditions, mainly as a result of the proposed derogations for passenger transport operations (particularly the derogations for domestic operations).

In terms of the preferred option on posting of workers, the costs for operators and enforcement costs for authorities are less in the case of a 9 days threshold – due to reduced number of trips within the scope of the minimum wage rules and, thus, costs of compliance and enforcement. On the other hand, from the point of view of workers, a lower threshold means reduced periods away from home (although the actual difference between the thresholds is rather minor) and also reduced impact on working conditions and health and safety. Thus, the 7 day threshold seems to provide a balance between the two potentially conflicting interests (PP4b).

Measures of weekly rest and on calculation of working time in PP2, together with PP4b, provide synergies. They should be expected to contribute to improved working conditions through a reduced level of stress and accumulated fatigue and clear and fair terms and conditions of employment of drivers (in particular as regards remuneration) as well as by providing rules on accommodation when spending long periods away from home. The synergy is expected to reinforce the positive impacts of PP2, which would remain the preferred option. The measures in PP2 should contribute to the objectives of PP4b of improving working of drivers and facilitating fair cross-border provisions of transport services.

PP2 and PP4b should also complement other Road Initiatives, in particular the revision of Regulations 1071/2009 and 1072/2009. While Regulations 1071/2009 and 1072/2009 will tackle issues of illicit employment linked to 'letterbox' companies and of illegal cabotage, PP2 will ensure that other cross-cutting measures taken by hauliers, when drivers are abroad for longer periods, e.g. sleeping in cabins, will not undermine social conditions and the level playing between hauliers. In addition, PP4b will ensure that current wage differentials, which can be an incentive to establish 'letterbox' companies or carry out illegal cabotage, will be reduced. The enforcement measures foreseen by PP2 and Regulations 1071/2009 and 1072/2009 are complementary and can be carried out jointly by national enforcement authorities, thus providing for overall better efficiency of enforcement. As such, the road initiatives, seen as a package, will work jointly and be mutually reinforcing. None of the initiatives stand-alone will be able to effectively solve the broader multifaceted problem of worsening working, social and business conditions.

## SYNTHÈSE

### **A. Objet et portée de l'étude**

La législation sociale en matière de transport routier a été mise en place afin d'atteindre les objectifs suivants :

- Assurer une situation équitable pour les conducteurs et les opérateurs ;
- Améliorer et harmoniser les conditions de travail ; et
- Améliorer le niveau de sécurité routière.

Elle se compose des actes législatifs suivants :

- Le Règlement 561/2006 qui définit les exigences relatives aux temps de conduite quotidiens et hebdomadaires, aux périodes de pause et de repos, et qui fixe les principes d'une application uniforme des règles ;
- La Directive 2002/15/CE qui définit les règles de l'organisation du travail des personnes exerçant des activités de transport routier mobile ; et
- La Directive 2006/22/CE qui définit les modalités d'application du Règlement 561/2006.

En outre, dans le cas de la fourniture transfrontalière de services de transport routier, les règles de la Directive 96/71/CE relatives aux détachements des travailleurs s'appliquent également, ainsi que celles de la directive d'exécution 2014/67/CE.

Suite à une évaluation ex post de la législation sociale, la Commission a identifié un certain nombre de problèmes, dont :

- de faibles niveaux de conformité à la législation;
- un fardeau réglementaire important en raison des différences de mise en œuvre de la législation d'un État membre à un autre ; et
- un niveau élevé de stress et de fatigue chez les conducteurs.

La Commission a constaté que les règles de la directive intersectorielle relative au détachement des travailleurs soulèvent des questions juridiques et des difficultés pratiques dans leur mise en œuvre dans le secteur fortement mobile du transport routier. Les mesures unilatérales adoptées par certains États membres sur l'application de leur salaire minimum aux opérateurs et conducteurs étrangers dans le cadre d'un détachement ne garantissent pas l'équilibre entre la protection sociale des travailleurs et la libre prestation des services transfrontaliers, qui est l'objectif principal de la Directive relative au détachement des travailleurs. La Commission a donc jugé approprié d'évaluer les problèmes de détachement des travailleurs dans le secteur des transports internationaux.

La présente étude vise à appuyer l'évaluation d'impact en vue de la révision du cadre législatif des règles sociales dans le secteur du transport routier, y compris les règles relatives au détachement des travailleurs.

### **B. Options stratégiques analysées**

Un certain nombre de mesures ont été identifiées en vue de résoudre les causes fondamentales sous-jacentes et les facteurs à l'origine de ces problèmes. Elles ont été regroupées en quatre paquets de mesures :

- **Paquet de mesures n°1 - Clarification du cadre légal et amélioration de la coopération** : ce paquet comprenait des mesures visant à clarifier les ambiguïtés actuelles sans modifier substantiellement les règles, ainsi que des mesures visant à améliorer la coopération entre les autorités d'application des règles, qui ne devraient pas avoir un impact significatif en termes de coûts.

- **Paquet de mesures n°2 – Renforcement de l'application des règles et modification des obligations** : ce paquet comprenait des mesures visant à renforcer l'application des règles (par exemple, accès aux systèmes d'évaluation des risques en temps réel, nombre minimum de vérifications permettant de contrôler le respect des dispositions en matière de temps de travail) et qui devaient impliquer des coûts réglementaires plus importants. Il comprenait également des mesures apportant des modifications aux obligations existantes des opérateurs et des conducteurs en matière de repos hebdomadaire (par exemple : modifications de l'approche utilisée pour le calcul du repos hebdomadaire régulier, interdiction de passer le repos hebdomadaire régulier dans les véhicules, réduction de la période de référence pour le calcul du temps de travail hebdomadaire moyen maximum). Toutefois, ce paquet de mesures ne modifie pas de manière significative le cadre général des règles.
- **Paquet de mesures n°3 – Révisions ciblées de la législation sociale** : ce paquet comprenait d'importantes modifications des dispositions actuelles (par exemple : interdiction de la rémunération au rendement) ainsi que des dérogations supplémentaires pour les activités occasionnelles de transport de passagers. Il incluait également des modifications de l'application des règles et de la surveillance, afin de soutenir la transition.
- **Paquet de mesures n°4 – Révisions de la Directive relative au détachement des travailleurs** : ce paquet, qui constitue une option stratégique horizontale (en ce sens qu'il pourrait être combiné avec l'un des Paquets de mesures n°1 à 3), comprenait des mesures instituant des règles spécifiques aux transports en matière de détachement (en établissant trois seuils de temps alternatifs pour l'application de certains aspects des règles de détachement, 5 jours (PM4a), 7 jours (PM4b), 9 jours (PM4c)) ainsi que des exigences adaptées au secteur en matière administrative et d'application des règles.

### ***C. Méthode et processus suivis***

L'analyse comprenait une évaluation des impacts économiques et sociaux des mesures proposées par rapport au scénario de référence. Les outils de recherche suivants ont été utilisés :

- Recherche documentaire et collecte de données en vue d'identifier, d'extraire et d'analyser des sources de données secondaires provenant d'études, de rapports et de bases de données pertinents. Ces travaux ont été utilisés pour le développement de la base de référence et la quantification des impacts des mesures proposées.
- Une consultation publique ouverte organisée par la Commission dans le cadre de laquelle un total de 1.378 réponses ont été recueillies : 169 pour le questionnaire spécialisé et 1.209 pour le questionnaire non spécialisé.
- Trois enquêtes, dont une enquête auprès des autorités nationales (41 réponses), une enquête auprès des conducteurs (345 réponses), et un sondage auprès d'un panel représentatif des PME (109 réponses).
- Une demande de données auprès des opérateurs de transport (73 réponses).
- Un total de 40 entretiens réalisés avec des parties prenantes sélectionnées et couvrant les autorités nationales responsables de la mise en œuvre et de l'application de la législation, des représentants de l'industrie (au niveau de l'UE et au niveau national), des opérateurs de transport individuels, ainsi que des représentants syndicaux.
- Deux visites d'étude : une première visite auprès des autorités d'application des règles aux Pays-Bas et une seconde visite auprès d'une entreprise en France. Elles visaient à explorer les aspects pratiques (par exemple, les délais nécessaires à l'application des mesures proposées) ainsi que les impacts

économiques (par exemple, les coûts de mise en place des mesures proposées) liés aux mesures stratégiques.

## ***D. Analyse d'impacts***

### ***D.1 Efficacité et efficacité des options stratégiques***

Les options stratégiques ont été analysées et évaluées par rapport à la base de référence en ce qui concerne :

- leur efficacité en termes de réalisation des objectifs clés, qui étaient notamment les suivants :
  - Contribuer à renforcer la conformité aux règles existantes ;
  - Contribuer à réduire le stress et la fatigue des conducteurs ;
  - Contribuer à réduire le fardeau réglementaire pour les entreprises et les États membres ;
- leur efficacité (coûts/économies) par rapport au scénario de référence.

En outre, en ce qui concerne l'applicabilité des dispositions relatives au détachement des travailleurs, les paquets de mesures ont également été évalués en fonction des critères suivants :

- Équilibre entre protection sociale des travailleurs et liberté de prestation des services transfrontaliers, en raison de l'objectif transversal du cadre juridique.

Les résultats obtenus sont résumés dans le Table 0-1.

**Tableau 0-1 : Comparaison des impacts des paquets de mesures en termes d'objectifs (par comparaison avec la base de référence)**

Fortement négatif		Faiblement négatif		Impact nul ou limité	Faiblement positif	Fortement positif
	Mesures sociales traditionnelles					Détachement de travailleurs
Impacts	PM1	PM2	PM3	PM4 (seuil de 5/7/9 jours)		
Efficacité						
Contribuer à renforcer la conformité aux règles existantes						
Amélioration prévue du niveau de conformité aux règles sociales de l'UE	Impact positif très limité sur les niveaux de conformité sur la base d'une clarté accrue et de certaines améliorations de l'application des règles.	Légère amélioration des niveaux de conformité en raison de l'amélioration globale de l'application des règles et de la clarté accrue du cadre juridique suite aux mesures proposées.	Impact positif des mesures du PM2 encore renforcé par le rôle positif de l'interdiction des rémunérations au rendement et de la simplification de la dérogation de 12 jours pour le transport international.	Impact incertain. Impact positif de la simplification significative des règles/procédures. Questions importantes sur la capacité à surveiller efficacement la période passée dans un pays hôte et à faire respecter la conformité – le seuil plus élevé de 9 jours serait moins exigeant en raison d'une portée réduite.		
Contribuer à réduire le stress et la fatigue des conducteurs						
Amélioration prévue de la durée des périodes d'éloignement du domicile	Impact négatif nul ou limité (de l'allongement) des périodes d'éloignement du domicile en permettant d'effectuer régulièrement des temps de repos dans les véhicules dans certains États membres.	Impact positif important sur les périodes d'éloignement du domicile – Augmentation de 43% du nombre de conducteurs effectuant leur repos hebdomadaire à domicile pour les conducteurs de l'UE13, et de 16% pour ceux de l'UE15.	Impact positif pour la plupart des conducteurs en raison des mesures du PM2. Un certain impact négatif pour les conducteurs de cars du fait de l'adoption d'une dérogation de 8/12 jours pour le transport domestique de voyageurs.	Certaines améliorations des périodes d'éloignement du domicile pour les conducteurs de l'UE13 (pays à moindre coût) en raison de la réduction des coûts de détachement et des périodes-seuils. Très faible amélioration de la période moyenne d'éloignement avec allongement du seuil de 5 à 7 et 9 jours.		
Amélioration prévue des niveaux de fatigue et de stress des conducteurs	Impact positif en raison de la réduction du stress (règles plus claires, possibilité accrue d'atteindre le domicile et amélioration des normes minimales de logement).	Réduction des niveaux de fatigue (~30%) sur une période de 4 semaines en raison des modifications combinées apportées au calcul du temps de repos hebdomadaire moyen et du temps de travail moyen. Réduction à long terme de 14 à 16% du fait du changement de calcul du temps de travail moyen. Améliorations du stress et de la fatigue en raison d'un cadre juridique plus clair, d'un meilleur niveau de logement qui est	Réduction de la fatigue jusqu'à (~30%) pour les conducteurs de fret dans le cadre du PM2, mais augmentation globale prévue de l'indice de fatigue de 8% pour les conducteurs de cars internationaux, et de 20 à 33% pour les conducteurs de cars domestiques en raison des dérogations proposées.	Impact négatif sur la fatigue et le stress en raison de l'augmentation des périodes d'éloignement du domicile.		

Impacts	Mesures sociales traditionnelles			Détachement de travailleurs
	PM1	PM2	PM3	PM4 (seuil de 5/7/9 jours)
		également payé, et de l'amélioration des possibilités de passer ses temps de repos à domicile/à la base.		
<b>Amélioration prévue de la sécurité routière et de la santé au travail</b>	Impacts positifs limités sur la fatigue en raison d'une conduite plus responsable et de la possibilité d'atteindre le domicile/la base en cas de circonstances exceptionnelles.	Impact positif significatif sur l'indice de risque en raison de l'effet combiné des mesures concernant le calcul du repos hebdomadaire moyen et de la période de référence pour le temps de travail (diminution de 24%) avec un impact positif supplémentaire dû aux mesures visant à interdire les repos hebdomadaires réguliers dans le véhicule et à obliger l'employeur à fournir ou à payer un logement adéquat et à modifier les pauses.	Léger impact positif supplémentaire pour les conducteurs de fret en raison d'une réduction des incitations suite au passage d'une rémunération au rendement à des règles de pause. Augmentation du risque – par rapport au PM2 – de 4% pour les conducteurs de cars internationaux et de 4 à 5% pour les conducteurs de cars domestiques soumis aux dérogations.	Impact négatif mineur et indirect en raison de la faible augmentation de la fatigue.
<b>Amélioration prévue des conditions de travail</b>	Faible impact positif en raison de la réduction de la fatigue/du stress.	Impacts positifs importants en raison des réductions significatives des niveaux de fatigue/stress et de la réduction des périodes d'éloignement.	Forts impacts positifs en raison de la réduction de la fatigue et des périodes d'éloignement, bien que plus faibles pour les conducteurs de cars affectés et – potentiellement – lorsque les conducteurs sont impactés par des rémunérations plus faibles s'ils ne sont pas indemnisés au titre des modifications apportées aux règles de rémunération au rendement.	Impacts négatifs réduits dans l'ensemble en raison de l'augmentation des périodes d'éloignement et d'une réduction possible des rémunérations par rapport à la base de référence pour les conducteurs de l'UE-13 opérant dans les pays qui disposaient auparavant de lois relatives au salaire minimum.
<b>Impact sur l'emploi et sur les niveaux et types de contrat de travail</b>	Impact positif mineur dû à l'amélioration des conditions de travail.	Impact positif global sur les niveaux d'emploi en raison de l'augmentation importante prévue de l'offre de conducteurs (plus attrayante) avec seulement une légère augmentation de la demande.	L'impact positif des mesures du PM2 n'est que partiellement contrebalancé par les impacts négatifs pour les conducteurs de cars affectés par les mesures.	Dans l'ensemble, impact incertain en raison des différents types d'impacts à la fois sur la demande et l'offre.
<b>Efficienne</b>				
<b>Réduire le fardeau réglementaire pour les entreprises et les États membres</b>				
<b>Coûts administratifs et de conformité pour les entreprises</b>	Impact net très limité prévu.	Coûts supplémentaires réduits prévus pour les opérateurs qui permettent ou encouragent les conducteurs à effectuer leur repos hebdomadaire dans les véhicules, avec coûts administratifs dus aux	Coûts supplémentaires des mesures du PM2 contrebalancées pour les opérateurs de transport de passagers du secteur des dérogations.	Réductions significatives des coûts administratifs et de conformité.  La réduction des coûts de

Impacts	Mesures sociales traditionnelles			Détachement de travailleurs
	PM1	PM2	PM3	PM4 (seuil de 5/7/9 jours)
		contrôles supplémentaires des temps de travail et flexibilité réduite par rapport à la période de référence de 4 semaines.		conformité va de 58% (seuil de 5 jours) à 79% (seuil de 9 jours). La réduction des coûts administratifs dans l'ensemble de l'UE est de 53%.
<b>Coûts de mise en œuvre et d'exécution pour les autorités</b>	Coûts supplémentaires limités principalement liés à des besoins supplémentaires en termes de temps et de personnels afin de répondre aux demandes d'informations émanant d'autres États membres dans le cadre d'une coopération administrative renforcée.	Coûts supplémentaires pour les autorités liés aux exigences supplémentaires en termes de temps et de personnels pour un nombre accru de contrôles des temps de travail et de rapports planifiés, et aux exigences portant sur les nouveaux équipements/logiciels en vue d'accéder au système d'évaluation des risques.	Augmentation des coûts – en plus du PM2 – en raison d'une application des règles plus chronophage pour les dérogations relatives aux conducteurs de cars.	Diminution générale de la portée et, très probablement, des coûts d'application des règles mais avec des impacts différents dans les États membres avec et sans règles en vigueur en matière de salaire minimum.

Dans le cas du **Paquet de mesures n°1**, une contribution positive es à prévoir en ce qui concerne la fatigue et le stress des conducteurs, ainsi que pour la santé et la sécurité au travail en raison d'un meilleur niveau d'hébergement prévu et d'une possibilité accrue d'atteindre le domicile. Cependant, seuls des impacts limités sont prévus au niveau de la conformité aux règles en raison d'une clarté accrue et de certaines améliorations dans l'application des règles. Le caractère volontaire des autres mesures devrait limiter leur efficacité. Du point de vue des coûts, il n'y a pas d'impact significatif prévu pour les entreprises ou les autorités. Dans l'ensemble, bien que le Paquet de mesures n°1 présente des coûts limités, le caractère volontaire de la plupart des mesures signifie qu'il aura également une efficacité limitée.

Dans le cas du **Paquet de mesures n°2**, une forte contribution positive est attendue s'agissant du niveau de stress et de fatigue des conducteurs suite à la réduction des périodes d'éloignement du domicile (réduction prévue de 43% pour l'UE-13, et de 16% pour UE-15), associée à une réduction des niveaux de fatigue (diminution de l'indice de fatigue de 30%). De même, un impact positif important sur le niveau de risque est prévu (réduction de 24% de l'indice de risque). Dans le même temps, les mesures du Paquet de mesures n°2 devraient entraîner une certaine amélioration du respect de la législation, en raison de l'amélioration globale de l'application des règles grâce à la clarté accrue du cadre juridique découlant des mesures proposées.

Bien que difficiles à quantifier, les implications en termes de coûts pour les opérateurs devraient être faibles – et principalement liées à la fourniture de logements, à des contrôles supplémentaires des temps de travail et à une flexibilité réduite par rapport à la période de référence de 4 semaines.

Les coûts supplémentaires pour les autorités devraient également être limités – et principalement liés aux exigences supplémentaires en matière de temps et de personnels pour un nombre accru de contrôles des temps de travail et de rapports envisagés, ainsi que des exigences fixées pour les nouveaux équipements/logiciels permettant d'accéder aux systèmes d'évaluation des risques.

Dans le cas du **Paquet de mesures n°3**, un impact positif plus fort est attendu sur les niveaux de conformité par rapport au Paquet de mesures n°2 en raison de l'interdiction des rémunérations au rendement et de la simplification de la dérogation de 12 jours pour le transport international. Toutefois, en termes de niveaux de stress et de fatigue, le Paquet de mesures n°3 devrait avoir des impacts moins positifs que le Paquet de mesures n°2. L'adoption d'une dérogation de 8 ou 12 jours pour le transport domestique de passagers devrait avoir des impacts négatifs sur les conducteurs affectés en termes d'allongement des périodes d'éloignement du domicile, de fatigue et de risque. Ce qui précède devrait également entraîner des impacts globaux un peu moins positifs du Paquet de mesures n°3 en termes de conditions de travail pour le transport de passagers, mais aussi un impact moins positif sur l'offre de conducteurs et sur les niveaux d'emploi. En termes de coûts des mesures proposées, les dérogations devraient permettre de réduire les coûts pour certains opérateurs par rapport au Paquet de mesures n°2. Du point de vue des autorités, les coûts devraient être légèrement supérieurs à ceux du Paquet de mesures n°2 en raison d'une application plus chronophage des dérogations concernant les transports nationaux par cars.

Dans l'ensemble, le Paquet de mesures n°3 semble moins efficace que le Paquet de mesures n°2, alors qu'il devrait présenter des coûts largement similaires.

Enfin, en ce qui concerne le **Paquet de mesures n°4 (a/b/c)**, des allongements des périodes d'éloignement du domicile sont à prévoir pour les conducteurs de l'UE-13 (pays à moindre coût) en raison de la réduction des coûts de détachement. Cela devrait également avoir un impact négatif sur la fatigue et, dans une moindre mesure, sur la sécurité routière. Un faible impact négatif sur les conditions de travail est également attendu en raison de l'allongement des périodes d'éloignement du domicile et de possibles réductions des salaires par rapport aux niveaux de référence pour les

conducteurs de l'UE-13 opérant dans les pays qui disposaient auparavant de lois relatives aux salaires minimums. Parmi les trois scénarios, un seuil plus réduit (5 jours) se traduit par des périodes réduites d'éloignement du domicile et également par un impact réduit sur les conditions de travail et sur la santé et la sécurité. Toutefois, la différence réelle entre les seuils envisagés est très limitée. L'impact de la mesure proposée sur la conformité est moins clair. Un impact positif de la simplification significative des règles/procédures est à prévoir, mais il existe également des questions importantes quant à la capacité à surveiller efficacement la période passée dans un pays hôte et à faire respecter l'application des règles.

En ce qui concerne les coûts du Paquet de mesures n°4, des réductions significatives des coûts administratifs et de conformité sont à prévoir pour les opérateurs. Les réductions attendues des coûts de conformité du Paquet de mesures n°4 par rapport aux règles de rémunération actuelles – telles qu'elles s'appliquent dans quatre États membres (Allemagne, France, Autriche et Italie) et telles qu'elles devraient s'appliquer en Belgique, au Danemark, au Luxembourg et en Suède – vont de 58% dans le cas d'un seuil de 5 jours (190 millions d'euros par an) à 79% dans le cas d'un seuil de 9 jours (605 millions d'euros par an). La plupart des économies de coûts (97%) devraient bénéficier aux opérateurs de l'UE13. Dans le même temps, les réductions de coûts administratifs prévues dans l'ensemble de l'UE sont de 53% (605 €/an), la plupart de ces économies (82%) devant bénéficier aux opérateurs de l'UE15.

En ce qui concerne les coûts pour les autorités, une diminution globale de la portée (nombre de voyages couverts) devrait également entraîner une diminution globale des coûts d'application des règles. Toutefois, cet impact sera différent selon les États membres. Le Paquet de mesures n°4 entraînera des diminutions significatives de la portée pour les États membres qui appliquent les règles de rémunération et devrait également entraîner une réduction des coûts d'application des règles. À l'inverse, tous les autres États membres verront une certaine augmentation des coûts d'application des règles. Au niveau de l'UE-28, un seuil de 9 jours réduira la portée de 78%, un seuil de 7 jours la réduira de 70%, et un seuil de 5 jours de 58%.

## ***D.2 Cohérence des options stratégiques***

Il n'y a pas de problèmes spécifiques en termes de **cohérence interne**, d'incompatibilités ou de lacunes entre les paquets de mesures, qui ont été conçus de manière à garantir que toutes les causes fondamentales et tous les facteurs soient abordés. C'est notamment le cas des **Paquets de mesures n°2 et n°3** et pour le **Paquet horizontal n°4**, qui incluent des mesures obligatoires qui devraient fonctionner de manière complémentaire afin d'améliorer l'efficacité de l'application des règles en renforçant la cohérence, en améliorant la communication et la coopération, et en apportant également un surcroît de clarté juridique. C'est probablement moins le cas du **Paquet de mesures n°1** qui comprend des mesures volontaires qui ne peuvent être adoptées par tous les États membres et qui, en pratique, n'abordent donc que partiellement certains des problèmes identifiés. S'agissant de l'application au transport routier des règles relatives au détachement des travailleurs, le **Paquet de mesures n°4** est cohérent avec les autres mesures axées sur les règles sociales traditionnelles du transport routier.

En ce qui concerne la **cohérence avec les principaux objectifs politiques de l'UE**, les impacts sur le principe de non-discrimination et d'égalité des chances, l'impact sur le fonctionnement du marché intérieur et l'impact sur les PME ont été examinés.

Au total, même si aucun des paquets de mesures ne présente des impacts négatifs globaux, l'analyse suggère que les **Paquets de mesures n°2 et n°3**, conjointement avec le **n°4**, obtiennent de meilleurs résultats que le **Paquet de mesures n°1**, qui devrait avoir un impact moins positif dans la mesure où il s'agit d'une mesure volontaire.

Le **Paquet de mesures n°2**, avec le **Paquet de mesures n°4 (a/b/c)** devrait avoir un meilleur impact sur la cohérence. Il aurait un impact sur les conditions de travail et aussi sur la manière dont les opérateurs et les conducteurs peuvent organiser le travail de manière plus souple sans enfreindre les règles. On estime que le **Paquet de mesures n°3 (+ n°4)** aura un impact similaire à celui du **Paquet de mesures n°2 (+ n°4)** sur la cohérence. En ce qui concerne l'impact sur les PME, le Paquet de mesures n°4 devrait avoir des impacts positifs et compenser en partie les impacts négatifs du Paquet de mesures n°2.

En ce qui concerne la **cohérence avec d'autres législations pertinentes de l'UE**, un certain nombre de mesures envisagées présentent des synergies permettant de réduire les distorsions de concurrence, de garantir une meilleure protection des droits des travailleurs, de renforcer la sécurité routière et d'améliorer globalement la coopération et la cohérence administratives ainsi que l'efficacité de l'application transfrontalière des règles avec une meilleure utilisation des outils numériques et des systèmes d'échange de données.

Les principales conclusions de l'analyse sur la cohérence sont résumées dans le Table 0-2.

**Tableau 0-2 : Comparaison des impacts des paquets de mesures en termes de cohérence**

Fortement négatif	Faiblement négatif	Impact nul ou limité	Faiblement positif	Fortement positif
<b>Mesures sociales traditionnelles</b>				<b>Détachement de travailleurs</b>
<b>Impacts</b>	<b>PM1</b>	<b>PM2</b>	<b>PM3</b>	<b>PM4 (seuil de 5/7/9 jours)</b>
<b>Cohérence interne</b>				
<b>Cohérence interne</b>	Aucun problème de cohérence mais plus difficile de garantir la mise en œuvre de toutes les mesures	Aucun problème de cohérence	Aucun problème de cohérence	Aucun problème de cohérence
<b>Cohérence avec les principaux objectifs politiques de l'UE</b>				
<b>Impact sur le principe de non-discrimination et d'égalité des chances</b>	Contribution négligeable à l'égalité de traitement au niveau de l'UE. Cela dépendra de l'application volontaire par les États membres des plans uniformes d'application recommandés par l'UE	Impact positif sur la réduction et la prévention des pratiques d'application discriminatoires dans les différents États membres	En plus du Paquet de mesures n°2, impact global positif sur l'égalité de traitement des conducteurs de cars internationaux et nationaux, ainsi que sur la réduction des incohérences dans les régimes de rémunération	Impact potentiellement positif en raison de la mise en place de dispositions plus claires et proportionnées en matière de détachement des travailleurs, bien qu'il existe des incertitudes quant à la mesure dans laquelle cela bénéficierait de manière égale aux conducteurs des différents États membres et au sein de la même entreprise
<b>Impact sur le fonctionnement du marché des transports et sur la concurrence</b>	Impact positif limité sur l'amélioration du fonctionnement du marché intérieur, et concurrence	Impact positif en termes de rectification des déficiences réglementaires identifiées et de	Impact positif sur le fonctionnement du marché intérieur et sur la concurrence loyale grâce à une série de mesures qui,	Impact incertain sur les conditions équitables de concurrence et sur la rectification des déficiences

	Mesures sociales traditionnelles			Détachement de travailleurs
Impacts	PM1	PM2	PM3	PM4 (seuil de 5/7/9 jours)
	plus équitable entre les opérateurs	contribution à la lutte contre la concurrence déloyale entre les entreprises des différents États membres	une fois combinées, réduisent la non-conformité et l'utilisation de modèles commerciaux et d'emploi illicites/douteux	réglementaires
<b>Impact sur les PME</b>	Faibles impacts négatifs résultant de l'alourdissement du fardeau administratif et des différentes règles sur la rémunération au rendement dans l'ensemble de l'UE, probablement contrebalancés par une flexibilité accrue acquise en permettant aux travailleurs de passer leur repos hebdomadaire dans leur véhicule	Impact négatif de la flexibilité découlant de la réduction de la période de temps de travail de référence, en partie compensée par de faibles impacts positifs liés à la flexibilité accrue découlant des changements apportés aux temps de pause et aux formulaires d'attestation	Autres impacts négatifs découlant de l'interdiction de passer le repos hebdomadaire dans le véhicule. Faible impact positif découlant de la flexibilité liée au transport de passagers et de l'interdiction de la rémunération au rendement	Impact positif pour la plupart des PME en réduisant les coûts administratifs pour la majorité des opérations
<b>Cohérence avec d'autres législations pertinentes de l'UE</b>				
Cohérence avec d'autres législations pertinentes de l'UE	Contribution limitée due au caractère volontaire de la plupart des mesures envisagées	Renforcement de l'application des règlements et du respect des règles sociales contribuant également au respect des règles d'accès au marché	Renforcement de l'application des règlements et du respect des règles sociales contribuant également au respect des règles d'accès au marché	Rôle positif d'une adoption plus large des règles de détachement en faveur d'une réduction du nombre de sociétés fictives et de faux établissements

### E. Option stratégique privilégiée

Dans l'ensemble, l'option stratégique privilégiée devrait être une combinaison des **Paquets de mesures n°2 et 4b**.

En ce qui concerne les mesures sociales traditionnelles du transport routier, le **Paquet de mesures n°2** devrait renforcer l'application des règles et clarifier le cadre juridique. Il devrait fournir les impacts les plus positifs en termes de réduction du stress et de la fatigue des conducteurs, sans impact négatif sur la sécurité routière et les conditions de santé sociale au travail. Il devrait également générer des réductions similaires des charges administratives pour les autorités nationales et les entreprises de transport. En comparaison, le Paquet de mesures n°3 semble présenter un impact plus négatif en termes de conditions sociales, principalement en raison des dérogations proposées pour les activités de transport de passagers (notamment les dérogations pour les opérations domestiques).

En ce qui concerne l'option privilégiée sur le détachement des travailleurs, les coûts pour les opérateurs et les coûts d'application des règles pour les autorités sont moins élevés dans le cas d'un seuil de 9 jours – en raison du nombre réduit de voyages dans le cadre des règles de salaire minimum et, par conséquent, des coûts de conformité et d'application des règles. D'autre part, du point de vue des travailleurs, un seuil inférieur se traduit par des périodes d'éloignement moins longues (bien que la différence réelle

entre les seuils soit plutôt mineure) et aussi par un impact réduit sur les conditions de travail ainsi que sur la santé et la sécurité. Ainsi, le seuil de 7 jours semble assurer un équilibre entre les deux intérêts potentiellement contradictoires (PM4b).

Les mesures du Paquet de mesures n°2 relatives au repos hebdomadaire et au calcul du temps de travail, associées à celles du Paquet de mesures n°4b, offrent des synergies. Elles devraient contribuer à améliorer les conditions de travail grâce à un niveau réduit de stress et de fatigue accumulée, à des conditions claires et équitables d'emploi des conducteurs (notamment en matière de rémunération), ainsi qu'à des règles d'hébergement pendant les périodes d'éloignement prolongées. Cette synergie devrait renforcer les impacts positifs du Paquet de mesures n°2, ce qui resterait l'option privilégiée. Les mesures du Paquet de mesures n°2 devraient contribuer aux objectifs du Paquet de mesures n°4b visant à améliorer le travail des conducteurs et à favoriser des dispositions transfrontalières équitables en matière de services de transport.

Les Paquets de mesures n°2 et 4b devraient également compléter d'autres initiatives du secteur routier, notamment la révision des Règlements 1071/2009 et 1072/2009. Bien que les Règlements 1071/2009 et 1072/2009 abordent les problèmes d'emploi illicite liés aux entreprises fictives et au cabotage illégal, le Paquet de mesures n°2 garantira que d'autres mesures transversales prises par les transporteurs lorsque les conducteurs sont à l'étranger pendant des périodes plus longues (par exemple : dormir dans les cabines) ne compromettent pas les conditions sociales et les conditions équitables de concurrence entre les transporteurs. En outre, le Paquet de mesures n°4b garantira que les écarts de salaire actuels, qui peuvent inciter à créer des entreprises fictives ou à effectuer des opérations de cabotage illégales, soient réduits. Les mesures d'application des règles prévues par le Paquet de mesures n°2 et les Règlements 1071/2009 et 1072/2009 sont complémentaires et peuvent être exécutées conjointement par les autorités nationales chargées de l'application des lois, ce qui garantirait une meilleure efficacité globale de l'application des règles. De ce fait, les initiatives routières, considérées comme un paquet de mesures unique, fonctionneront de concert et se renforceront mutuellement. Aucune des initiatives ne pourra, de manière autonome, résoudre efficacement le problème plus vaste et multiforme de la dégradation des conditions de travail, des conditions sociales et des conditions d'activité des entreprises.

## **1. INTRODUCTION AND OVERVIEW**

This is the final report for the study “Support study for an impact assessment for the revision of the social legislation in road transport”. The report has been submitted by Ricardo Energy & Environment, the consultants appointed to conduct this study.

The report includes:

- A presentation of the policy context and problem definition (Annex A);
- Definition of policy objectives (Section 2) and the policy measures and policy packages under consideration (Section 3);
- Presentation of the methodology (Section 4);
- Presentation of the baseline scenario that will be the reference point for analysing the impacts of the policy options (Section 5);
- Analysis of the expected impacts of each proposed policy measure and the policy packages (Section 6);
- Comparison of the policy options in terms of the effectiveness, efficiency and coherence (Section 7);
- Identification of the preferred policy option (Section 8).

## **2. POLICY OBJECTIVES**

The initiative aims at ensuring the effectiveness and efficiency of the original system put in place by the adoption of the legislative framework and therefore contributing to the original policy objectives, namely:

1. To ensure a level playing field for drivers and operators;
2. To improve and harmonise working conditions; and
3. To improve the level of road safety.

An additional objective, in the context of the applicability of the provisions on posting of workers, is

4. To ensure balance between the entrepreneurial freedom to provide cross-border transport services and the social protection rights of highly mobile road transport workers.

The above set of general objectives has also been translated to the following set of specific objectives:

1. To contribute to the higher compliance with the existing rules;
2. To contribute to reduction of stress and fatigue of drivers;
3. To contribute to the reduction of the regulatory burden to businesses and Member States.

## **3. POLICY OPTIONS**

A set of policy measures have been selected intended to address the problems and the underlying root causes and drivers as identified in the problem definition described in Annex 1. They were selected from a broader list of measures that is presented in Annex C where a number of measures were discarded following an initial screening process (see Section 3.2). The policy measures were also grouped into four policy packages that have been defined cumulatively, to reflect increasing level of regulatory intervention (see Section 3.3).

### 3.1. Retained policy measures

Table 3-1 provides a mapping between the retained policy measures grouped by the key problem area and the problem drivers as well as root causes that they aim to target. Several measures address more than one problem driver and/or root cause, and some measures may be proposed as voluntary (V) i.e. introduced through the soft-law, or Compulsory (C), i.e. introduced through hard law.

**Table 3-1 List of retained policy measures**

Key:

*Root Causes:* (A) Unclear / lack of precision rules; (B) Unfit / insufficient rules; (C) Insufficient administrative cooperation; (D) Inefficient/inconsistent use of control tools and systems.

*Drivers:* (1) Divergent interpretation of the rules / uncoordinated national measures; (2) Inconsistent and ineffective enforcement of the current rules; (3) Transport operators habitually carrying out transport operation in/from country outside their establishment.

Proposed measure	Root cause	Driver
<b>Requirements concerning the weekly rest</b>		
(1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks. The weekly rest period of less than 45 hours should not, however, be less than 24 hours and the reduction should be compensated by an equivalent period taken <i>en bloc</i> and attached to another weekly rest period.	(A)	(1) (2) (3)
(2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'.	(A)	(1) (2) (3)
(3) Allow for spending a regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.	(A)	(1) (2)
<b>Requirements on breaks, resting and driving times</b>		
(4) Clarify that breaks, resting and driving time arrangements may be adapted (without changing time limits) to address specific exceptional circumstances under which transport operation is carried out and/or to enable reaching home/base	(A)	(1) (3)
(5) Allow drivers to split a minimum break in driving time of 45 minutes into a maximum of 3 portions of at least 15 minutes each. The basic provisions on breaks remain unchanged.	(A)	(1) (2)
(6) Adapt '12-day rule' in international occasional passenger transport by coach by abolishing previous obligations and introduce new obligation to take one regular and one reduced weekly rest <i>en bloc</i> .	(A)	(1) (2)
(7) Allow for flexibility for domestic occasional transport of passengers by coach[2]: (a) '12-day rule' – allowing to postpone weekly rest for up to 12 periods of 24 h, provided that a driver takes regular weekly rest of minimum 45 h before and 69 h after the use of the derogation; (b) '8-day rule' – allowing to postpone weekly rest for up to 8 periods of 24 h provided that a driver takes regular weekly rest of minimum 45 h before and after the use of the derogation;	(A)	(1) (2)
<b>Enforcement</b>		
(8) Allow controllers to access the risk-rating system in real-time of control (both for roadside and premises checks)	(C)	(2)
(9) Establish the (Voluntary or Compulsory) EU uniform formula for calculating risk rating, which would also include the results of so called "clean" checks (no infringement detected)	(B) (C)	(1) (2)
(10) Enhance administrative cooperation of national control authorities by introducing a time to respond to requests of one MS within a certain time period: (i) 2 working days in urgent cases (e.g. in case of very serious infringements and (ii) 25 working days in non-urgent cases unless a shorter time limit is mutually agreed	(B)	(2)

Proposed measure	Root cause	Driver
(11) Abolish attestation forms on top or instead of tachograph records to demonstrate the activities/inactivity periods when away from vehicle, and define a solution as to how 'other' work is best controlled.	(A)(C)	(1)(2)
(12) Clarify links between Regulation 561/2006 and Directive 2002/15 in terms of derogations: (a) derogations from the driving and resting times rules granted in exceptional circumstances may also result in derogation from the weekly working time thresholds; (b) derogations from the driving and resting times rules granted in exceptional circumstances may <u>not</u> result in derogation from the weekly working time thresholds;	(A)	(1)(2)
<b>Working time requirements and control</b>		
(13) Reduce the reference period used for a calculation of the maximum average weekly working time of 48h to 4 weeks	(A) (C)	(1) (2)
(14) Extend checks at the roadside and at premises also to compliance with working time. Establish (Voluntary or Compulsory) minimum threshold for controlling compliance under Directive 2006/22	(A) (B) (C)	(1) (2)
(15) Establish (Voluntary or Compulsory) reporting template for biennial national reports on results of controls of compliance with WTD similar to reporting template for checks on Regulation 561/2006.	(A) (B) (C)	(1) (2)
<b>Scope of the road transport social legislation</b>		
(16) Define operations of occasional non-professional driver for private purposes and exclude them from the scope of the Regulation 561/2006	(A)	(1) (2)
<b>Performance-based pay</b>		
(17a) Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried);	(A) (B) (C)	(1) (2) (3)
(17b) Forbid all performance based payment (based on distances travelled / amount of goods carried);	(A) (B) (C)	(1) (2) (3)
<b>Application of posting of workers rules to road transport</b>		
(18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD.	(D)	(3) (4)
(19) Tailored enforcement system with adapted administrative requirements and a two-step enforcement process, where the first step is the roadside check carried out by the controllers on the territory of the 'host' Member State and the second step is further examination, which may include, if requested by host Member State, the check at the premises of a company (driver's employer) by the enforcement authorities of the country of establishment of that company.	(D)	(4)
(20) Oblige the driver to record in the tachograph the country code of the country where he is, each time he stops a vehicle.	(D)	(4)

### 3.2. Discarded policy measures

A number of measures were discarded as part of the screening process. The first phase of the screening process is summarised and provided in Annex B. As a result of the first screening process 29 measures were identified. After a second screening, six measures were discarded. These were:

*Requirements on spending regular weekly rest on the vehicle (art.8.8 561/2006).*

- **Allow for spending (up to) every second regular weekly rest in the vehicle (all other weekly rest requirements remain unchanged)**

This measure was discarded as it was not considered to effectively address the problems relating to securing and improving the social conditions of drivers. Moreover, the measure contradicts the social objectives of the revision.

### *Multi-manning*

- **Allow one driver for the first two hours or the last one hour of the journey**

The proposed measure on changing the requirements for multi-manning was not taken forward in the assessment as it was thought not to improve the functioning of the social rules. By contrast, it was expected to endanger road safety at the end of the journey.

### *Enhance enforcement 2006/22/EC*

- **Include additional criteria for establishing national penalty systems to ensure that the level and type of penalties are proportionate to the level of seriousness of infringements**

It was argued that the harmonisation of the different systems would require burdensome intervention in the national penalty systems. In addition, harmonising penalty systems would also risk the jeopardising the subsidiarity principle.

- **Make training for new enforcers' compulsory and according to common curriculum as established by the implementing act of the Commission (required by Article 39 of Regulation 165/2014)**

The legal feasibility of this measure was considered to be weak. The Tachograph Regulation already requires the Commission to adopt an implementing Act on the content of training for enforcers and guidelines for application of the Regulation (No) 561/2006 and Regulation (No) 165/2014. Therefore it was argued that there is no scope for the revision of the social measures to address this issue.

- **Create a European Road Transport Agency tasked with enforcing 'international' offenses, monitoring national legislation, formulating proposals for improving EU-level provisions and improving the cooperation across Member States**

A European Road Agency would need to be established by a Regulation under co-decision. It would need to be preceded by a full-fledged impact assessment detailing which tasks such an agency would undertake and which added value it would have. Moreover, this would need to be supported by a calculation of costs due to the financial implications on the EU budget. Given that such an assessment would go beyond the current revision of the existing road transport legislation, it was excluded from the assessment in the Road Initiatives.

### *Clarification and scope of the Social Legislation*

- **Review clause – obligation on EC to review in 5 years' time the scope of the legislation to verify whether or not it would be justified and proportionate to include drivers of LGVs (of below 3.5t), to exclude self-employed, to update derogations and exemptions**

With regard to the measure of excluding self-employed drivers from the scope of the working time rules, it was not expected to improve the effectiveness and efficiency of the current social legislation. Moreover, as a result of the open public consultation, most Member States (i.e. national authorities) did not support this proposal.

The proposal of reviewing the scope of the legislation in regard to the inclusion of LGVs was not considered feasible as it was thought to contravene the proportionality principle. Only weak evidence was found to justify for including LGVs in the scope of the social legislation. Moreover, it is expected that such measure would not find political support from all Member States due to the possible significant rise in compliance costs (in particular, due to the installation of tachograph and purchase of driver card) and general practical implementation issues.

### 3.3. Identification of policy packages

Given the diversity and complexity of the issues to be addressed and the fact that they are interdependent, four sets of policy packages have been established. The first three policy packages focus on the regulatory issues linked to the 'traditional' road transport social legislation (i.e. working time, driving times and rest periods). They have been defined cumulatively, in order to reflect increasing level of regulatory intervention. The fourth package is horizontal and combines the measures aimed to address revisions to the Posting of Workers Directive (PWD).

**Table 3-2 Definition of policy packages**

<b>Policy package 1 – Clarification of the legal framework &amp; improve cooperation (P1)</b>
<ul style="list-style-type: none"> <li>Measures aimed at clarifying existing ambiguities without substantially changing the rules;</li> <li>Measures aimed at improving cooperation among enforcement authorities that are not expected to have significant costs impacts.</li> </ul>
<b>Policy package 2 – Strengthening of enforcement and changes to obligations (P2)</b>
<ul style="list-style-type: none"> <li>Measures aimed at strengthening enforcement that are expected to involve more significant regulatory costs;</li> <li>Measures introducing changes to the existing obligations of operators/drivers;</li> <li>However, this policy package does not significantly change the overall framework of the rules.</li> </ul>
<b>Policy package 3 – Targeted revisions of the social legislation (P3)</b>
<ul style="list-style-type: none"> <li>Significant changes to current provisions (e.g. forbid the performance-based pay);</li> <li>Derogations for specific activities from the scope of the legislation;</li> <li>Accompanying changes to the above requirements for enforcement and monitoring, in order to support the transition.</li> </ul>
<b>Policy package 4 – Revisions to PWD – horizontal policy option</b>
<ul style="list-style-type: none"> <li>Measures for transport-specific rules on posting, including sector-tailored administrative and enforcement requirements;</li> </ul> <p>Policy Package 4 can possibly be combined with any of Policy Packages 1-3.</p>

Table 3-3 shows the allocation of measures to each policy package, as well as mapping out which root cause and driver each measure is addressing. The earlier policy measures have been adapted to take into account different policy packages.

**Table 3-3 Definition of Policy Packages and mapping to root causes and drivers**

Key:

*Root Causes:* (A) Unclear / lack of precision rules; (B) Unfit / insufficient rules; (C) Insufficient administrative cooperation; (D) Inefficient/inconsistent use of control tools and systems.

*Drivers:* (1) Divergent interpretation of the rules / uncoordinated national measures; (2) Inconsistent and ineffective enforcement of the current rules; (3) Transport operators habitually carrying out transport operation in/from country outside their establishment.

Policy package	Root cause(s)			Driver(s)		
	(A)	(B)	(C)	(1)	(2)	(3)
<b>(PP1) Clarification of the legal framework &amp; improve cooperation</b>						

Policy package	Root cause(s)			Driver(s)		
	(A)	(B)	(C)	(1)	(2)	(3)
<b>Requirements concerning the weekly rest<sup>1</sup></b>						
Allow for spending the regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances (3) <sup>2</sup>	✓			✓	✓	
<b>Breaks, resting and driving times</b>						
Clarify that break, resting and driving time arrangements can be adapted (without changing the time limits) to address specific exceptional circumstances under which transport operations are carried out and/or to enable reaching home/base (4)	✓			✓	✓	✓
<b>Enhance enforcement</b>						
Establish recommended EU uniform formula for calculating risk rating (9 V)		✓	✓	✓	✓	
Enhance administrative cooperation of national control authorities by introducing a recommended time to respond to requests of one MS within a certain time periods (10)		✓			✓	
Clarify links between Regulation 561/2006 and Directive 2002/15 in terms of derogations: (12 a) derogations from the driving and resting times rules granted in exceptional circumstances may also result in derogation from the weekly working time thresholds; (12 b) derogations from the driving and resting times rules granted in exceptional circumstances may not result in derogation from the weekly working time thresholds;	✓			✓	✓	
<b>Working time requirements and control</b>						
Establish recommended minimum threshold for controlling compliance with working time provisions in line with requirements for checks at the premises under Directive 2006/22 (14 V)	✓		✓	✓	✓	
Establish recommended reporting template for biennial national reports on results of controls of compliance with WTD similar to reporting template for checks on Regulation 561/2006 (15V)	✓		✓		✓	
<b>Scope of the social legislation</b>						
Define operations of occasional non-professional driver for private purposes and exclude them from the scope of the Regulation 561/2006 (16)	✓		✓	✓		
<b>Performance-based pay<sup>3</sup></b>						
Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried) (17a)	✓			✓	✓	
<b>(PP2) Strengthening of enforcement and changes to obligations – includes all PP1 measures plus:</b>						
<b>Requirements concerning the weekly rest</b>						
Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks. The weekly rest period of less than 45 hours should not, however, be less than 24 hours and the reduction should be compensated by an equivalent period taken <i>en bloc</i> and attached to another weekly rest period (1)	✓			✓	✓	✓

<sup>1</sup> Measures addressing an issue of requirements concerning the weekly rest are not cumulative and their distribution varies depending on the PP

<sup>2</sup> number of policy measure

<sup>3</sup> Measures addressing an issue of performance-based pay are not cumulative. Two implementation scenarios are assessed for PP1/PP2 and PP3

Policy package	Root cause(s)			Driver(s)		
	(A)	(B)	(C)	(1)	(2)	(3)
The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation' (2)	✓			✓	✓	✓
<b>Breaks, resting and driving times</b>						
For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged (5)	✓				✓	
<b>Enhance enforcement</b>						
Allow controllers to access the risk-rating system in real-time of control (both for roadside and premises checks) (8)			✓		✓	
Establish recommended EU uniform formula for calculating risk rating (9 C)		✓	✓	✓	✓	
Abolish attestation forms on top or instead of tachograph records and define how 'other' work is best controlled (11)	✓	✓		✓	✓	
<b>Working time requirements and control</b>						
Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks (13)	✓		✓	✓	✓	✓
Establish obligatory minimum threshold for controlling compliance with working time provisions in line with requirements for checks at the premises under Directive 2006/22 (14 C)	✓		✓	✓	✓	
Establish obligatory reporting template for biennial national reports on results of controls of compliance with WTD similar to reporting template for checks on Regulation 561/2006 (15 C)	✓		✓		✓	
<b>(PP3) Targeted revisions of the social legislation – includes all PP1 and PP2 measures plus:</b>						
<b>Breaks, resting and driving times</b>						
Adapt '12-day rule' in international occasional passenger transport by coach (6)	✓			✓	✓	
Allow for flexibility for domestic occasional transport of passengers by coach: (7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc. (7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.	✓			✓	✓	
<b>Performance-based pay</b>						
Forbid all performance based payment (based on distances travelled / amount of goods carried) (17b)	✓			✓	✓	

**Table 3-4: Definition of Policy Packages related to the application of PWD and mapping to root causes and drivers**

Key for the application of the application of PWD:

Root Causes: (D) Unfit rules for the highly mobile road transport sector.

Drivers: (4) Uncoordinated national measures for PWD and (3) Long periods away from home/base

<b>(PP4) Revisions to PWD – horizontal policy option with three variants corresponding to the three thresholds of 5, 7 and 9 days (PP4 a, b and c)</b>						
<b>Posting of Workers</b>				<b>(D)</b>	<b>(4)</b>	
Set time-thresholds (measured as the number of days and nights spent in				✓	✓ and	

a host Member State over a month). Variant a – 5 days, variant b – 7 days and variant c – 9 days (18)		(3)
Tailored enforcement system with adapted administrative requirements and two-step enforcement process, where the first step is the roadside check carried out by the controllers on the territory of the 'host' Member State and the second step is further examination, which may include, if requested by host member State, the check at the premises of a company (driver's employer) by the enforcement authorities of the country of establishment of that company (19)	✓	✓
Oblige the driver to record in the tachograph the country code of the country where he is, each time he stops a vehicle. Establishing frequency of presence of a driver in a Member State at roadside checks by controller (20)	✓	✓

The majority of the requirements provided in PWD (e.g. on health, safety and hygiene at work) would be immediately applicable from the beginning of the posting independent of a specific time-threshold. However, in order to take into account the specificities of transport activities, the requirements for minimum paid annual holidays and the minimum rates of pay would be applicable only if the posting reaches a certain time threshold. If the posting of a worker in a host Member State does not reach this threshold, a driver will be subject to the requirements on minimum paid annual holidays and the minimum rates of pay of his/her home country. Three variants of this time threshold were considered under PP4:

- A specific time-threshold for road transport of 5 days accumulated over a month;
- A specific time-threshold for road transport of 7 days accumulated over a month;
- A specific time-threshold for road transport of 9 days accumulated over a month.

## 4. METHOD/PROCESS FOLLOWED

### 4.1. Desk research and data collection

Desk research has been used to develop the baseline (see Section 5) and to support the analysis of the impacts. The work conducted included:

- Analysis of data from monitoring reports;
- Collection of data from relevant data sources (e.g. Eurostat);
- Analysis of key documents (e.g. the Ex-post evaluation of the social legislation (Ricardo et al, 2016)) and documents (position papers, studies) submitted from stakeholders to the open consultation;
- Targeted analysis of relevant additional literature sources informed the analysis of the baseline and the assessment of the different type of impacts. References to all literature used in the analysis are provided in Section 9.

### 4.2. Analysis of inputs from the open public consultation

The Commission developed and launched an open public consultation (OPC) that was run from 5 September to 11 December 2016. This included a 'specialised' questionnaire targeting EU and national authorities, NGOs, industry associations, trade unions and enforcement authorities, and a 'non-specialised' questionnaire targeting drivers, road hauliers, passengers transport companies and individual citizens. A total

of 1,378 responses were collected: 169 for the specialised questionnaire, and 1,209 for the non-specialised questionnaire.

**Table 4-1 Classification of stakeholders responding to the OPC**

Stakeholder category	Region of operation (as indicated by respondent)	No. of responses	% of responses	% of total
Driver or other road transport worker (employee)	EU-wide	173	47%	
	National	170	46%	
	Non-EU/Other	26	7%	
	None/No response	3	1%	
	<b>Total</b>	<b>372</b>	<b>100%</b>	<b>31%</b>
Road haulier	EU-wide	143	53%	
	National	83	31%	
	Non-EU/Other	38	14%	
	None/No response	5	2%	
	<b>Total</b>	<b>269</b>	<b>100%</b>	<b>22%</b>
Passenger transport company	EU-wide	117	55%	
	National	73	35%	
	Non-EU/Other	20	9%	
	None/No response	1	0%	
	<b>Total</b>	<b>211</b>	<b>100%</b>	<b>17%</b>
Self-employed driver	National	136	66%	
	EU-wide	64	31%	
	Non-EU/Other	4	2%	
	None/No response	2	1%	
	<b>Total</b>	<b>206</b>	<b>100%</b>	<b>17%</b>
Other company in the transport chain (shipper, forwarder)	EU-wide	25	56%	
	National	13	29%	
	Non-EU/Other	5	11%	
	None/No response	2	4%	
	<b>Total</b>	<b>45</b>	<b>100%</b>	<b>4%</b>
Private individual	National	16	42%	
	Non-EU/Other	12	32%	
	EU-wide	7	18%	
	None/No response	3	8%	
	<b>Total</b>	<b>38</b>	<b>100%</b>	<b>3%</b>
Other	National	30	44%	
	EU-wide	18	26%	
	Non-EU/Other	7	10%	
	Non-EU/Other	13	19%	
	<b>Total</b>	<b>68</b>	<b>100%</b>	<b>6%</b>
Grand Total		<b>1209</b>	<b>100%</b>	<b>100%</b>

The results of the OPC were screened to identify possible additional policy options (see Section 3 and Annex B where the findings (i.e. a long-list of policy options) were discussed in more detail). The analysis of the responses to the OPC is provided in Annex F.

### 4.3. SME Panel

The SME panel survey was developed by the Commission, and included two sub-questionnaires: one on the application of the posting of workers provisions in the road transport sector, and the second on driving times, working times and rest periods in road transport. The survey was open from November 4<sup>th</sup> 2016 to January 4<sup>th</sup> 2017. The analysis of the 109 responses to the SME panel survey is included in Annex F.

**Table 4-2 Classification of stakeholders responding to the SME Panel survey**

Stakeholder category	Region of operation (as indicated by)	No. of responses	% in category	% of total
Road haulage operator	Domestic and international	12	71%	
	Domestic only	5	29%	
	International only	0	0%	
	Other	0	0%	
	<b>Total</b>	<b>17</b>	<b>100%</b>	<b>29%</b>
Passenger transport operator	Domestic and international	8	57%	
	Domestic only	4	29%	
	International only	2	14%	
	Other	0	0%	
	<b>Total</b>	<b>14</b>	<b>100%</b>	<b>24%</b>
Driver or other road transport worker (employee)	Domestic and international	5	38%	
	Domestic only	8	62%	
	International only	0	0%	
	Other	0	0%	
	<b>Total</b>	<b>13</b>	<b>100%</b>	<b>22%</b>
Self-employed driver	Domestic and international	1	17%	
	Domestic only	5	83%	
	International only	0	0%	
	Other	0	0%	
	<b>Total</b>	<b>6</b>	<b>100%</b>	<b>10%</b>
Other	Domestic and international	6	86%	
	Domestic only	0	0%	
	International only	1	14%	
	Other	0	0%	
	<b>Total</b>	<b>7</b>	<b>100%</b>	<b>12%</b>
No response	Total	<b>2</b>	<b>100%</b>	<b>3%</b>
Grand Total		<b>59</b>	<b>100%</b>	<b>100%</b>

### 4.4. Targeted stakeholders surveys

#### 4.4.1. Survey of Drivers

An online survey of drivers was developed and promoted via a number of driver forums in six countries (see Table 4-3). The survey was developed in English and translated into five additional languages: French, German, Polish, Bulgarian and Romanian. The survey was open from January 23<sup>rd</sup> to March 10<sup>th</sup>.

**Table 4-3 Driver forums used to disseminate the drivers survey**

	Forum contacted	Country	Outcome
1.	<a href="http://www.trucknetuk.com/">http://www.trucknetuk.com/</a>	UK	Survey posted by administrator
2.	<a href="http://www.les-camionneurs.forumpro.fr">www.les-camionneurs.forumpro.fr</a>	FR	Survey posted by Ricardo
3.	<a href="http://www.fierdetreroutier.com">www.fierdetreroutier.com</a>	FR	Survey posted by Ricardo
4.	<a href="http://www.wagaciezka.com">www.wagaciezka.com</a>	PL	Survey posted by Ricardo
5.	<a href="http://www.Soferdetir.ro">www.Soferdetir.ro</a>	RO	Survey posted by Ricardo
6.	<a href="http://www.brummionline.com">www.brummionline.com</a>	DE	Survey posted by Ricardo
7.	<a href="http://www.truckerfreunde.de">www.truckerfreunde.de</a>	DE	Survey posted by Ricardo
8.	<a href="http://forums.soferii.com">forums.soferii.com</a>	RO	Survey posted by Ricardo
9.	<a href="http://www.driver-bg.eu/">http://www.driver-bg.eu/</a>	BG	Survey posted by Ricardo

In addition to the drivers' forums, the survey was promoted using assistance from the European Transport Workers Federation (ETF) and national trade unions. Moreover, we invited drivers who participated in the OPC, those who agreed to be contacted for other consultation activities.

In total 345 responses were received, although 140 of them come from the Netherlands and 127 from the UK. The analysis of the responses is provided in Annex F.

**Table 4-4 Responses to drivers' survey**

Member State	Number of responses	Percentage
Total	<b>345</b>	<b>100%</b>
<i>EU13</i>	<b>22</b>	<b>6%</b>
Poland	8	36%
Bulgaria	5	23%
Romania	5	23%
Czech Republic	2	9%
Lithuania	1	5%
Slovenia	1	5%
<i>EU15</i>	<b>317</b>	<b>92%</b>
Netherlands	140	44%
United Kingdom	127	40%
France	28	9%
Germany	11	3%
Sweden	4	1%
Spain	2	1%
Ireland	2	1%
Belgium	2	1%
Luxembourg	1	1%
<i>Other</i>	<b>6</b>	<b>2%</b>

#### 4.4.2. Survey of National Authorities

The survey directed at national authorities (implementing and enforcement authorities) was launched on the 19<sup>th</sup> of January 2017 and remained open February 17<sup>th</sup>.

The questionnaire was structured around the different pieces of legislation that are relevant to this study (i.e. Regulation (EC) No 561/2006, Directive 2002/15/EC, Directive 2006/22/EC and Posting of Workers Directive (PWD).

In total, 41 responses were received from EU28 Member States (except Poland) plus Norway and Switzerland. In a number of cases, separate responses were received by authorities involved in different aspects of the implementation or enforcement of the legislation.

**Table 4-5 Responses to the survey of national authorities**

Member State	No of responses	Authorities
<i>EU15</i>		
Austria	3	Federal Ministry of Interior
		Federal Ministry of Labour, Social Affairs and Consumer Protection
		Federal Ministry of Transport
Belgium	3	Labour Inspectorate
		Federal Public Service for Employment, Labour and Social Dialogue
		Federal Ministry of Mobility
Denmark	1 <sup>4</sup>	Ministry of Transport
Finland	2	Coordinated response by Ministry of Social Affairs and Health, Finnish Transport Workers' Union (AKT), Employers' Federation of Road Transport (ALT).
		Finnish Ministry of Transport and Communications and Finnish Transport Safety Agency
France	1	Ministry of Transport
Germany	2	Federal Ministry of Labour and Social Affairs
		Federal Ministry of Transport
Greece	3	Labour Inspectorate
		Ministry of Labour, Social Security and Social Solidarity
		Ministry of Infrastructure and Transport
Ireland	1	Road Safety Authority
Italy	1	Coordinated response by Ministry of Labour and Social Policies; National Labour Inspectorate; Ministry of Infrastructures and Transportation; Ministry of Interior.
Luxembourg	1	Customs & Excise Agency
Netherlands	1	Human Environment and Transport Inspectorate
Portugal	1	ACT - National Labour Authority
Spain	1	Ministry of Infrastructure
Sweden	2	Ministry of Enterprise & Energy and Communications
		The Swedish Transport Authority
UK	1	Driver and Vehicle Standards Agency (DVSA)
Total	<b>24</b>	
<i>EU13</i>		

<sup>4</sup> Denmark submitted a memorandum which was not possible to include in the survey analysis.

Member State	No of responses	Authorities
Bulgaria	2	Labour Inspectorate Ministry of Transport Information Technology and Communications
Croatia	1	Ministry of the sea, Transport and infrastructure – Directorate for transport inspections.
Cyprus	1	Department of Labour Inspection (DLI)
Czech Republic	2	General Directorate of Customs
Estonia	2	Estonian Police and Border Guard Board Ministry of Economic Affairs and Communications
Hungary	2	Ministry for National Economy & Department of Labour Inspections (Employment) Ministry of National Development
Lithuania	1	Ministry of Transport and Communication
Latvia	2	Coordinated response by Road Transport Administration; State Police; Ministry of Transport State Police of Latvia
Malta	1	Department of Industrial & Employment Relations
Poland	0 <sup>5</sup>	n/a
Romania	1	Ministry of Transport
Slovenia	1	Ministry of infrastructure
Slovakia	1	National Labour Inspectorate
Total	<b>17</b>	
<i>EEA</i>		
Switzerland	1	Federal Roads Office (FEDRO)
Norway	1	The Norwegian Public Roads Administration
Total	<b>2</b>	

The analysis of the responses is provided in Annex F.

#### 4.5. Direct information requests

We used direct information requests to obtain information from transport operators on specific aspects. The information requests were used to develop the baseline, as well as to assess impacts on costs to business.

Information request forms were distributed to transport operators that responded to the OPC and the SME panel. Requests were sent by email on the 17<sup>th</sup> February and respondents were given 3 weeks to respond (March 10<sup>th</sup>).

In total 73 responses to data requests were received, although 58 of these were from Hungary (of which 42 were part of Coordinated Group 1). Table 4-6 presents the breakdown of responses. The analysis of the responses is provided in Annex F

**Table 4-6 Response to transport operators data request**

Member State	Total		Excluding coordinated responses	
	Number of responses	Percentage	Number of responses	Percentage
Total	<b>73</b>	<b>100%</b>	<b>32</b>	<b>100%</b>
<i>EU13</i>	<b>67</b>	<b>92%</b>	<b>26</b>	<b>81%</b>

<sup>5</sup> Poland was the only country invited to respond who did not submit a response to the survey.

Member State	Total		Excluding coordinated responses	
	Number of responses	Percentage	Number of responses	Percentage
Hungary	58 <sup>6</sup>	79%	17 <sup>7</sup>	53%
Czech Republic	4	5%	4	13%
Bulgaria	3	4%	3	9%
Romania	1	1%	1	3%
Poland	1	1%	1	3%
<b>EU15</b>	<b>6</b>	<b>8%</b>	<b>6</b>	<b>19%</b>
Austria	1	1%	1	3%
Denmark	1	1%	1	3%
France	1	1%	1	3%
Ireland	1	1%	1	3%
Spain	1	1%	1	3%
Sweden	1	1%	1	3%

## 4.6. Interviews

### 4.6.1. Exploratory interviews

We interviewed five EU-level representatives in November and December 2016, in order to refine the problem definition, as well as identifying the most relevant policy options. The organisations were:

- International Road Union (IRU)
- European Passenger Transport Operators (EPTO)
- European Transport Workers' Federation (ETF)
- Confederation of Organisations in Road Transport Enforcement (CORTE)
- Driver and Vehicle Standards Agency (UK)

### 4.6.2. Stakeholder interviews

As part of the main interview programme, we intended to complete up to 40 stakeholder interviews covering a broad range of stakeholders. Table 4-7 summarises the progress made.

A dedicated team worked on the interview programme adapting the targeting of interviewees according to the responses received and by sending regular reminders. The interview programme initially ran until 10<sup>th</sup> March 2017. However, it was extended by 3 more weeks to accommodate requests from some stakeholders and to complete interviews with authorities.

In total, 56 stakeholders were invited to interview and 35 interviews were conducted. The target of 40 interviews was nearly met while respecting a balance between EU13 and EU 15 countries.

<sup>6</sup>42 responses from Hungary were part of Coordinated Group 1, as well as 1 Polish response

<sup>7</sup> Includes 1 response counting the 42 Hungarian responses from Coordinated group 1

**Table 4-7: Overview of interview progress**

Type of Stakeholder	Interviews		
	Invited	Declined	Carried out
Transport Company (BG, CZ, DE, HU, PL, SK, EU-wide)	15	5	7
National Industry Associations (AT, BG, CZ, DE, DK, ES, FR, PL, RO)	11	2	9
National Authorities (Transport Ministries and Enforcement Authorities) (AT, BE, BG, NL, DE, LV, RO, SE)	15	1	9
National workers' unions (BE, IT, NL, SI)	7	2	4
Other (International Association of Transport Companies) (ETF, UETR, NLA, UEAPME, EEA, CORTE, ECR)	<b>7</b>	<b>0</b>	<b>6</b>
<i>EU-15</i>	<i>30</i>	<i>6</i>	<i>15</i>
<i>EU-13</i>	<i>19</i>	<i>4</i>	<i>14</i>
<i>EU-Wide</i>	<i>7</i>	<i>0</i>	<i>6</i>
<b>Total</b>	<b>56</b>	<b>10</b>	<b>35</b>

#### **4.7. Study visits**

The objective of the study visits was to discuss in more detail the practical aspects (e.g. time required to enforce the suggested measures) and economic impacts (e.g. costs of introducing the proposed measures) relating to the policy measures.

With regard to individual transport undertakings, interviews were arranged with a transport manager or a person responsible for the management/organisation of the operations able to provide the relevant information. For the study visit with enforcers, we arranged to speak with a stakeholders with experience in carrying out both roadside and premises checks as well as having a good understanding of the costs of carrying out enforcement activities.

We intended to carry out up to four study visits; however, it was only possible to secure two within the timeframe of the study. One with the enforcement authorities in the Netherlands and the second with an undertaking in France. Contacts were made with 3 more organisations but it was not possible to organise a visit during the period of the study.

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

The results of individual research tools used present significant limitations that might impact on the robustness of the findings.

Since it was not possible to conduct any of the surveys using randomised samples (due to the lack of a sampling frame), respondent bias is a standard problem that may impact the representativeness of the results. This was considered less of an issue where we achieved a high response rate and a good balance of respondents across various Member States (as in the case of the survey of authorities and the interview programme). However, it is not possible to use statistical techniques to correct this type of bias (indeed, increasing the sample size only tends to make the non-response bias worse) – therefore, we have attempted to address this limitation by discussing how the results vary among the different subgroups.

The design of the surveys also suffered from some limitations due to the need to avoid having overly long and complicated questionnaires that would be detrimental to the response rates. Due to the large number of policy measures considered (more than 20), the depth that it was possible to go into for each measure was limited.

Furthermore, all of the results from surveys and interviews have been interpreted as a means to gain a deeper understanding of different positions of respective stakeholders and to provide broader support for other evidence (triangulation), rather than as concrete facts.

## 5. BASELINE SCENARIO

### 5.1. *Market context*

In terms of the overall context, developments in levels of transport activity in the baseline are taken to be in line with the EU 2016 Reference Scenario (European Commission, 2016a):

- Total road freight activity (domestic and international) in the EU-28 is projected to increase by about 34% between 2015 and 2035, reaching 2,564 Gt-km in 2035.
- International (transit) road freight is projected to increase by about 40% between 2015 and 2035, reaching 263 Gt-km in 2035.

Furthermore, according to (Ricardo et al., 2017), the overall amount of cabotage is forecast to increase by around 30% by 2035 (also in line with the projected increases in overall transport activity across the EU).

In terms of drivers wages, according to the EU Reference scenario a small level of convergence of wages in the transport section is expected over the period 2020-2035<sup>8</sup> (European Commission, 2016a). Thus, existing differences in terms of wages costs in transport between EU-15 and EU-13 Member States (Broughton et al, 2015) (CNR, 2016) and overall labour costs should be expected to remain.

### 5.2. *Assumed evolution of main problem drivers*

Regarding **Driver 1 (Divergent interpretation of the rules)**, it is expected that Member States will retain their current rules/interpretations of the road transport social legislation. As a result, there will be limited improvement in terms of the harmonisation of the interpretation of the rules across Member States. Following the conclusions in Ricardo et al. (2016), rules will remain unclear/unfit/insufficient, leading to proliferation of different national interpretations.

Further clarification/guidance notes may be issued; however, their non-binding nature limits their effectiveness in terms of achieving harmonisation. This is evidenced by experience from the existing set of guidance/clarification notes, which did not lead to notable changes in national interpretations of the rules (Ricardo et al, 2016).

It is expected that enforcement authorities will make continuous efforts to align their enforcement practices with each other via platforms such as CORTE and Euro-Controlle-Route (ECR). Stakeholders generally consider such platforms as quite useful in the exchange information on enforcement practices and best-practice approaches (Ricardo et al, 2016). However, given the voluntary nature of such platforms, these efforts will only have limited effects on the harmonisation.

Ricardo et al (2016) has shown that there is a varying application of the derogations provided in Article 13 of Reg. 561/2006 and in Article 8 of the Working Time Directive (2002/15/EC). Hence, the possibility of derogations will also contribute to continuing national differences.

Regarding **Driver 2 (Inconsistent and ineffective enforcement of the current rules)**, it is expected that cross-border enforcement will remain inconsistent – as concluded in Ricardo et al. (2016)- leading to unequal treatment of drivers and operators. Levels of cooperation in response to specific information requests and

---

<sup>8</sup> Expected average growth rate over the period 2015-2035 for EU15 is 1.25% in comparison to 2.64% in the case of EU-13.

cross-border enforcement will also remain largely the same, with some Member States being more active than others (Ricardo et al, 2016). Still, a number of developments are expected to take place that can have positive contribution. These include:

- The gradual increase in the uptake of the digital tachograph is expected to make certain checks more effective (Ricardo et al, 2016). The adoption of 'smart' tachographs will increase in line with fleet turnover rates.
- The obligatory connection to TACHONet by March 2018 - according to Commission Implementing Regulation 2016/68 (European Commission, 2016c) - will increase electronic information exchanges across Member States regarding driver cards and further facilitate cross-border enforcement through the automated exchange of information regarding driver cards.
- Member States that connect to the ERRU in coming years will slightly increase information exchanges via ERRU, as the overall functioning of the system comes online (Ricardo et al, 2016). Available data on exchanges of information using ERRU in the 2013/2014 reporting period showed that in most cases there was still little interaction, with only a few Member States being active (Ricardo et al., 2017).

Regarding **Driver 3 (Long periods away from home/base with poor access to adequate living/resting conditions)**, developments will be largely determined by:

- The presence of wage laws in some Member States (see also Driver 4). Wage laws are already in place in four Member States (Germany, France, Austria and Italy) and, according to the Commission services, they are expected to be introduced in four more (Sweden, Belgium, Denmark and Luxembourg)<sup>9</sup> by 2019 (European Commission, 2017) (see Section 5.3.1.2). The introduction of wage laws should largely eliminate cost advantages between drivers from low-cost Member States and domestic drivers. As a result, a reduction in the periods away from home for drivers from low-cost Member States (mainly EU-13) should be expected in those Member States that have wage laws (see also Section 5.3.3).
- The overall trends in international and cabotage trips. Since there is only marginal convergence of wages in the EU 2016 Reference Scenario (European Commission, 2016a), the effect of wage differentials (cost advantages) will remain constant over time in the baseline for host countries that do not introduce minimum wage laws. It is therefore assumed that the periods away from home will grow in line with growth in international transport trends already outlined above.

At the same time, the problem of long periods away from home is expected to remain largely limited to the freight transport sector. In the case of passenger transport, competition in passenger transport is less fierce and the level of cabotage operations is expected to remain relatively limited. There are still important barriers to entry (including access to terminals and limited terminal capacity) and limited benefit in extending journey times on a long international service to serve domestic passengers (Steer Davis Gleave, 2016).

Concerning **Driver 4 (Diverging national interpretations of the Posting of Workers Directive and the different national measures)**, it is expected that differences among Member States and uncertainty in relation to the application of posting of workers legislation will remain. As indicated above, it has been assumed that by 2019, eight Member States<sup>10</sup> will have national wage laws. These countries have relatively high labour and social protection standards and are commonly 'host' countries, due to their location and their levels of trade/consumption. At the same

---

<sup>9</sup> We should still note that there have been no clear statements of intent provided by the authorities in these 4 Member States.

<sup>10</sup> AT, BE, DE, DK, FR, IT, LU, SE.

time, other Member States do not (at least in practice) enforce the PWD on foreign operators and drivers carrying out road transport services to/from/within their territories. It is assumed that this will continue to be the case. This assumption is also supported by the fact that a number of authorities interviewed (Czech Republic, Hungary, Spain, Poland, Romania) consider that the PWD provisions should not apply to the transport sector and are not planning to apply existing provision on transport sector drivers. Thus, in the absence of EU action, this divergence among national authorities should be expected to continue.

Finally, there are possible impacts from the UK decision to exit the EU. The situation is highly uncertain at this point. In the context of the study for the revision of Regulations 1071/2009 and 1072/2009 (Ricardo et al., 2017), it was indicated by a UK hauliers association that specific measures will need (or should be) adopted to ensure that the same general rules continue to apply for transport operators from/in the UK. On the basis of a discussion with the Commission services, it has been agreed that the basic assumption for the analysis should be that the same rules will continue to apply.

### ***5.3. Analysis of the evolution of key problem variables in the baseline***

Several key variables that reflect the problem definition have been further analysed. These include:

- Levels of compliance with the rules
- Periods spent away from home
- Levels of fatigue and stress
- Costs for business and authorities
- Dubious/illicit business/employment practices

#### ***5.3.1. Levels of compliance***

##### ***5.3.1.1. Compliance with social rules***

#### **Analysis of monitoring data**

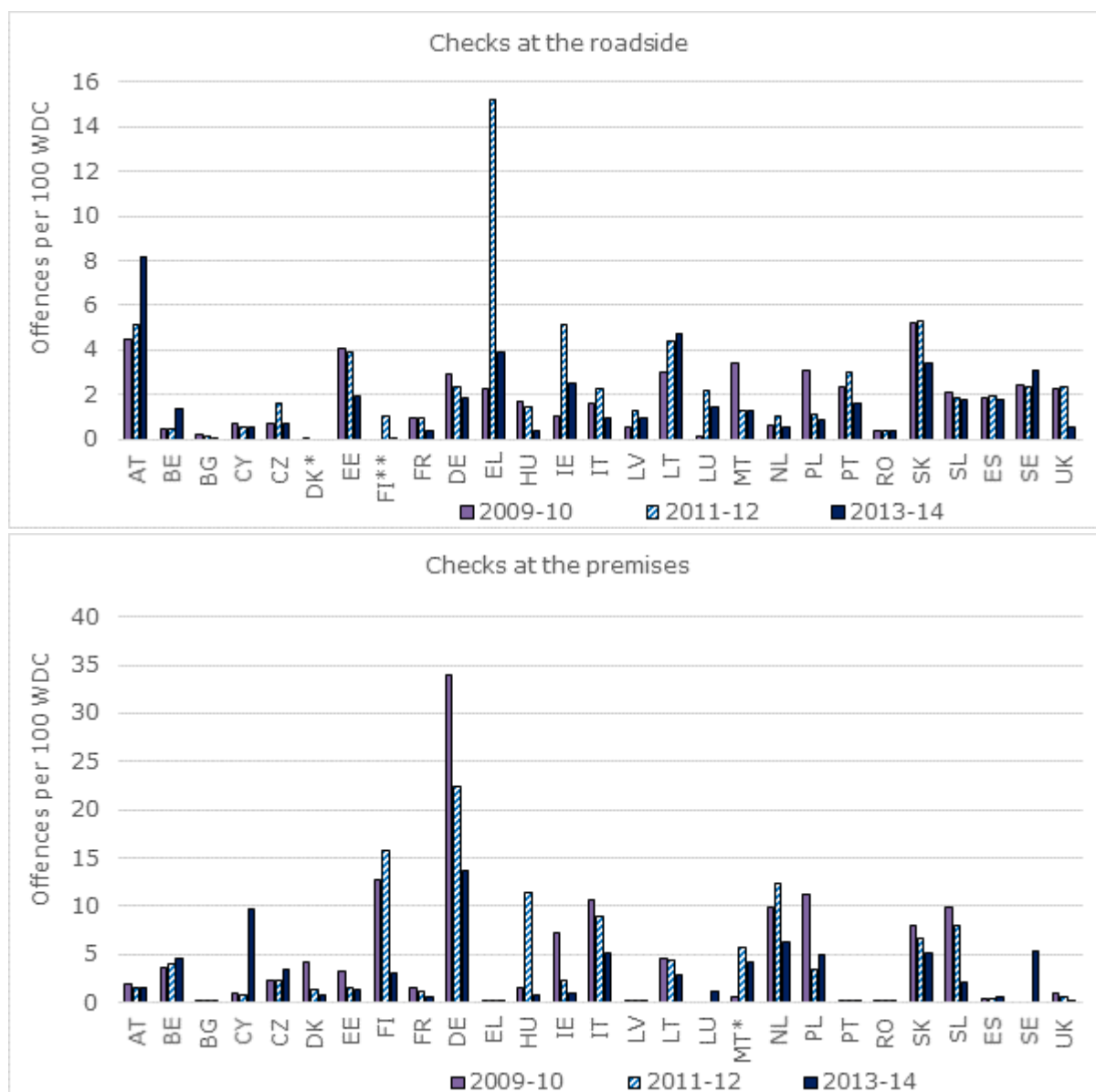
In an effort to quantitatively define what the baseline development of levels of compliance would be, we have analysed the available reporting data covering the three most recent reporting periods (2009/2010, 2011/2012, 2013/2014). The reported infringement detection rates have been used as a proxy to understand the trends in compliance, since they represent the best-available indicator. However, there are some important limitations that mean they are not a perfect indicator of underlying compliance because of the influence of other factors such as differences in enforcement practices (e.g. thoroughness of checks).

Each type of check (roadside and premises) is a distinctly different enforcement activity - checks at the roadside involve a single vehicle at a time, whilst checks at the premises typically encompass multiple vehicles in a transport operator's fleet. To account for this the analysis of infringement rates is carried out separately.

#### **Trends in infringements rates**

The absolute infringement rates for checks across each Member State varies significantly, as illustrated in Figure 5-1. The main things to note are the large discrepancies in the infringement rates seen, the implications of which are discussed further below.

**Figure 5-1: Infringement rates per 100 working days checked (WDC)**



Source: (European Commission, 2012b) (European Commission, 2014b) (European Commission, 2016b)

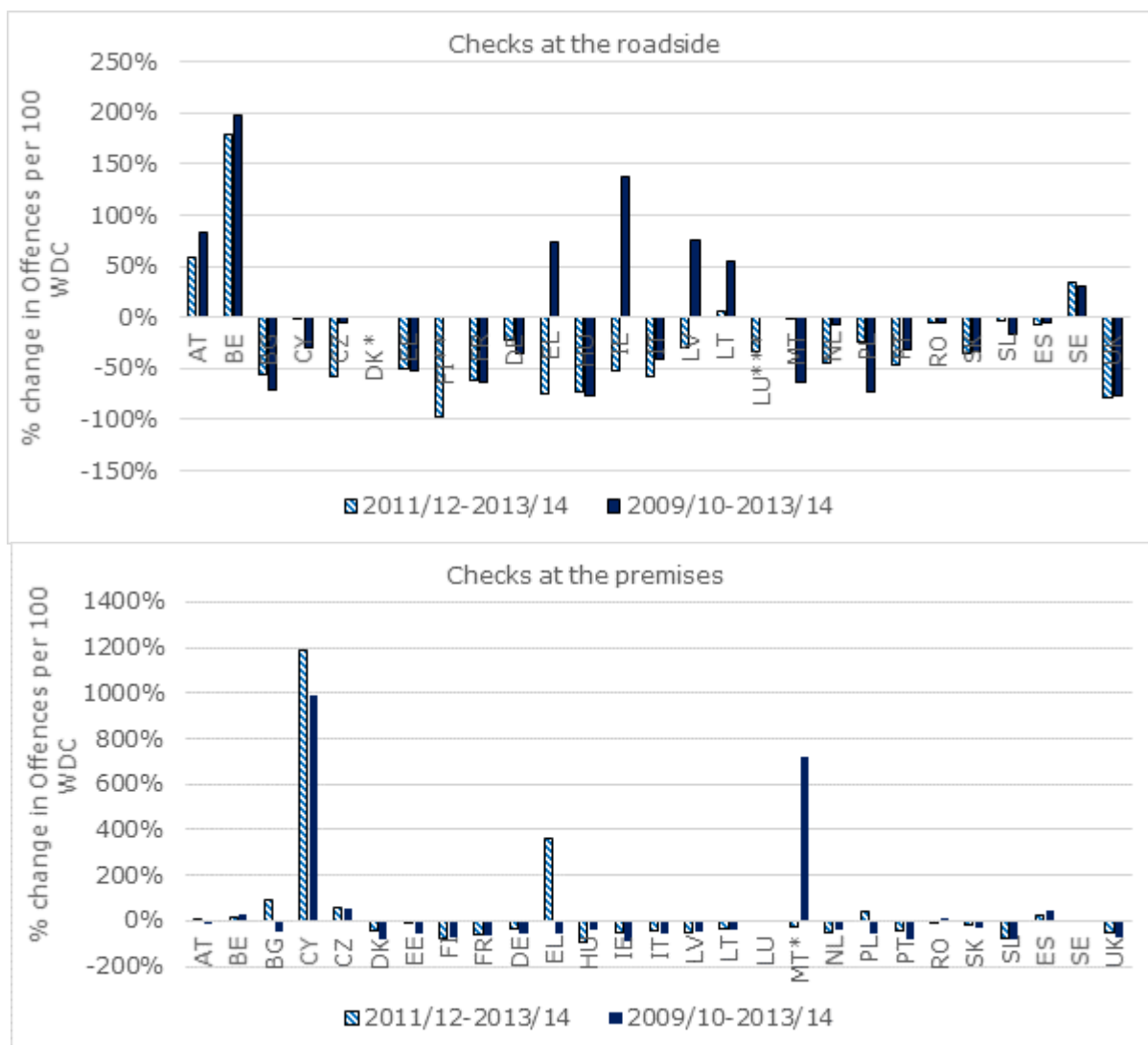
Notes:

\*No data available for 2013/14 period

\*\*No Data available for 2009/10 period

Analysis of changes over time show very large fluctuations, which suggest possible reporting issues or changes to enforcement practices rather than changes in underlying behaviours. Figure 5-2 shows the percentage change between infringement rates between the latest reporting period (2013/14) and the previous two reporting periods. Large fluctuations of more than 50% – positive or negative - are seen in 11 out of 27 Member States between 2011/12 and 2013/14 for roadside checks, and in 13 Member States when comparing with the 2009/10 period. There is similarly high variation in the case of checks of premises.

**Figure 5-2: Percentage change between 2013/14 reporting period vs 2009/10 and 2011/12 – checks at the roadside**



Source: (European Commission, 2012b) (European Commission, 2014b) (European Commission, 2016b)

Notes;

\*No data available for 2013/14 period

\*\*No Data available for 2009/10 period

### Regression analysis

The variability in the data, discussed above, suggests that the quality of the time series data is insufficient to develop any robust statistical relationships for the baseline. Indeed, the issue of inconsistencies in reporting practices were discussed in (Ricardo et al, 2016), which rendered the results incomparable over time. As such, it is not considered appropriate to attempt to use the historical data on year-by-year changes to inform the analysis.

Instead, we attempted to use a cross section of the 2013/14 data (i.e. using data from the same reporting period covering all Member States) to see if there were any steady-state trends. This was based on an assumption that the reporting quality may have improved over time, and hence the latest reporting data could be the best / most accurate representation of the true situation. This could be the case due to improvements in the reporting template, consistency checks carried out internally / by the EC, as well as general experience gained after several years of meeting the

reporting requirements. However, it turned out that after extensive statistical analysis, the quality of the reporting data were still too inconsistent to provide any insight into factors that influence compliance.

A wide range of variables were tested for the 2013/14 cross section for checks including:

- Infringement rates – separately for checks at roadside and at the premises;
- % of the minimum threshold for checks that was met – separately for checks at roadside and at the premises (as an indicator of the “intensity” of enforcement in each country - the higher this ratio, the higher the enforcement effort of the country);
- Dummy variables to indicate whether a country is EU-15 or EU-13;
- Total haulier operating costs;
- Driver costs (labour costs, including salary);
- % of driver salary that is variable payment;
- Maximum fines for infringement of the social legislation, in Euros and Purchasing Power Parity adjusted;
- Maximum fines for infringement of the social legislation, as a % of haulier costs;
- Number / share of enforcers equipped with digital tachograph-reading equipment.

Simple and multiple-regressions were employed to establish whether there were any relationships between the variables tested. We tested both linear and logarithmic models to determine whether there were unit- or percentage-type relationships between any of the variables. Disappointingly, the vast majority of the models lacked significance, even at the 10% level. For those models that did return some level of significance, it was typically weak (i.e. maximum of 10%, and only for some parameters), and the lack of results using other tests suggests that the model was unlikely to be robust.

Even where relationships intuitively make a great deal of sense – both logically and backed up in economic literature – we could not detect any statistical relationship. We believe that this is because the noise in the reporting data is so large (due to reporting inconsistencies) that it obscures any true relationships that might exist. As such, a qualitative description of the expected trends in compliance is the only option. This is consistent with the approach followed in Ricardo et al. (2016) where it was concluded that comparing the data from infringement rates was not possible and only qualitative input was used.

The analysis of trends in compliance draws from the assumed evolution of the drivers/problems described above, i.e.:

- Unintentional infringements:
  - Will decrease over time, as drivers/operators become more used to the rules and IT software solutions to ensure driver compliance penetrate the fleet more;
  - However, they will not be completely eliminated due to persisting problems of different interpretations and inconsistent enforcement of the rules;
- Intentional infringements:
  - Gradual improvements over time is expected due to:
    - Continued sharing of best practices in cross-border concerted checks and via voluntary membership in organisations such as ECR and slight improvements in connection via ERRU/TACHONET;
    - Uptake of the TRACE (Transport Regulators Align Control Enforcement) and CLOSER (Combined Learning Objectives for Safer European Roads) training curricula;

- Increasing penetration of digital tachographs into the fleet;
- However, there will continue to be a level of intentional non-compliance, due to:
  - Continued insufficient administrative cooperation in cross-border enforcement specific to social rules;
  - Continued inconsistent enforcement of current rules;
  - Continued problems of unfit rules for the sector;
  - Continued cost-based competition that puts pressure on costs and wages;

Infringements of manipulation of tachographs will, in longer term, decrease as a result of deployment of more tamper proof 'smart' digital tachograph and more advanced digital enforcement techniques.

### **5.3.1.2. Compliance with posting of workers legislation in transport**

There is currently no clarity as to the applicability of PWD to road transport at EU level. At this point, compliance with the PWD provisions is considered as compliance with the national measures transposing the PWD and the Posting Enforcement Directive 2014/67/EU into national legislation.

As already explained in Section 5.1, four Member States (Germany, France, Austria, and Italy) have already implemented and enforced national minimum wage laws (in the framework of PWD). These involve specific administrative activities that must be carried out by foreign operators to meet control requirements, which are summarised in Table 5-1.

**Table 5-1: Minimum wage requirements in transport**

Member State	Legislation	Date adopted	Requirements apply from:	Activities covered	Penalties for non-compliance
AT	Act to Combat Wage and Social Dumping (LSD-BG),	published on 13.06.2016, in force since 01.01.2017	First day	International and cabotage operations (except transit)	€1,000-€10,000
IT	Legislative Decree No 136	17.07.2016	First day	Cabotage operations and temporary agency road transport workers	€150-€6,000
DE	Minimum Wage Act	1 January 2015	First day	International and cabotage operations (except transit)	€30,000-500,000
FR	2014-1569 Decree (Loi Macron) setting minimum wage  Implementing Decree 2016-418	Implementing decree adopted on 7 April 2016	First day	International and cabotage operations (except transit)	€ 2000 per posted worker, € 4000 for re-offense

Source: Commission services (European Commission, 2017)

According to the information provided by the Commission Services, the remaining EU Member States do not currently enforce the rules on posting to foreign operators and drivers carrying out road transport services to/from/within their territories. However, for the purposes of the baseline, it has been assumed that four more Member States (BE, DK, LU, SE) that signed the 'Road Alliance' (Road alliance, 2017) demanding 'respect of fundamental social rights of drivers' will adopt similar measures by the end of 2018 (see also Section 5.1). We have assumed that the above four Member States will introduce requirements that will apply from the first day and will cover both cabotage and international operations, and consequently the administrative requirements will be similar to Germany and Austria. The more costly provisions applicable in France including the requirement to establish a representative will not apply.

In terms of the actual compliance levels, data on the level of compliance in the four Member States where the rules are already in place (Germany, France, Italy, Austria) are not available<sup>11</sup>, which means that a quantitative baseline is not possible. Qualitatively, it can be expected that there will be a degree of unintentional non-compliance due to the difficulty of meeting all of the requirements, which can lead to mistakes – this is evidenced by input from a number of industry representatives (see Section 5.3.5.2). Over time, as operators become acquainted with the requirements and build relevant experience, unintentional non-compliance should decrease.

In terms of intentional non-compliance, as with all legislation, levels are likely to be influenced by several factors. Higher non-compliance is typically seen where costs of compliance are particularly high and enforcement is weak (in terms of the probability of being caught and the penalties levied). In the case of PWD, there are factors working in opposite directions. On the one hand, the administrative costs involved for operators (see Section 6.2.1) may create incentives to infringe the rules, especially considering the intense cost competition in the sector. On the other hand, very severe national sanctions in some countries (as seen in Table 5-1) can act as a strong deterrent for non-compliance. On balance therefore, a certain level of non-compliance should be expected that depends on how extensively the rules are enforced at the national level (i.e. the probability of detection of non-compliance).

### **5.3.2. Use of dubious/illicit business and employment schemes**

The level of **use of dubious/illicit business and employment schemes by some operators** is linked with the status of implementation and enforcement of the social rules and posting of workers described in the previous section.

The use of such schemes also depends on the evolution of the economic environment. Changes to Regulations 1071/2009 and 1072/2009 - including more effective enforcement of cabotage and checks of stable establishment - are expected to reduce the level of letterbox companies and illegal cabotage. Both of these activities are correlated with the use of illegal employment schemes. Ricardo et al. (2017) estimated that the adoption of the preferred policy option could lead to a reduction of incentives for formation of letterbox companies by up to 10% and reductions in illegal cabotage by up to 62%. This should already help to reduce the use of illicit employment schemes in the baseline.

However, as indicated earlier (Section 5.1), road freight transport is expected to continue to be characterised by low-profit margin and cost-driven competition, which creates incentives for the use of dubious employment schemes in order to cut costs. The 2016 EU Reference Scenario projects only slight convergence in labour costs between EU-13 and EU-15 countries, suggesting that this problem will not be solved by levelling of the playing field across Europe.

---

<sup>11</sup> A request was sent to the German and Austrian authorities but they were unable to provide any details.

At the same time, adoption of national measures requiring the application of the domestic wage and working conditions of the host country described earlier should also reduce the scope for applying home country wage standards. Thus, under the baseline scenario, it is assumed that the use of illicit business and employment schemes should eventually diminish in the case of operations in the 8 Member States adopting national measures<sup>12</sup>. It may still remain in the case other 20 Member States due to the continued presence of divergent social standards.

### **5.3.3. Periods away from home**

Since the primary concern from a social perspective is over drivers spending very long periods away from home, we concentrated on the case of drivers spending 10 or more days per month in a particular country as a key indicator.

The baseline is calculated in several steps:

- **Step 1:** establishing the number of relevant trips and periods away from home for the base year 2014/15.
- **Step 2:** projecting activity in the baseline out to 2035.

#### **5.3.3.1. Step 1: establishing the number of relevant trips and periods away from home for the base year 2014/15**

Data from the parallel study on PWD (DTU, 2017) were used to inform the baseline analysis of periods away from home. The study used data from national distance-based tolling systems in Germany and Belgium to estimate the average probability that a driver's stay in a country will have a certain duration (in days). These were calculated for pairs between the posting country (i.e. country of origin of the driver) and host country (country that the truck is driving in). An important assumption in agreement with the Commission is that the country of registration of the truck is the same as the country of origin of the driver. In practice, there is likely to be variation; however, there is no concrete data available to make any more specific assumptions.

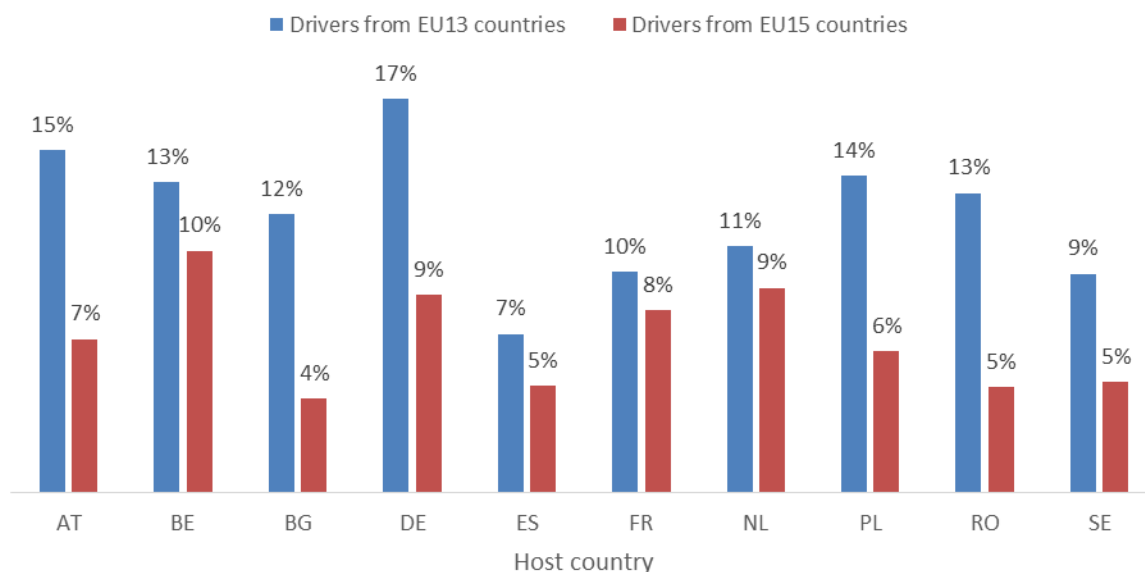
Figure 5-3 shows the probability of drivers from the EU-13 and EU-15 spending 10 or more days in a host country for the baseline year of 2014/15 (DTU, 2017)<sup>13</sup>. It shows that EU-13 drivers are more likely to spend longer periods away from home in all 10 countries for which data are available (12% of EU-13 drivers spend 10 or more days per month in a host country, compared to 7% of EU-15 drivers). The literature also seems to support this finding - for instance, several studies suggest that EU-13 drivers are more likely to spend longer periods away from home (TRT, 2013) (Broughton et al, 2015). At the same time, several studies have highlighted that many EU-15 drivers also spend long periods away from home (Broughton et al, 2015); (COWI, n.d.).

---

<sup>12</sup> DE, FR, IT, AT, SE, DK, BE, LU

<sup>13</sup> Based on data received on 19th April 2017

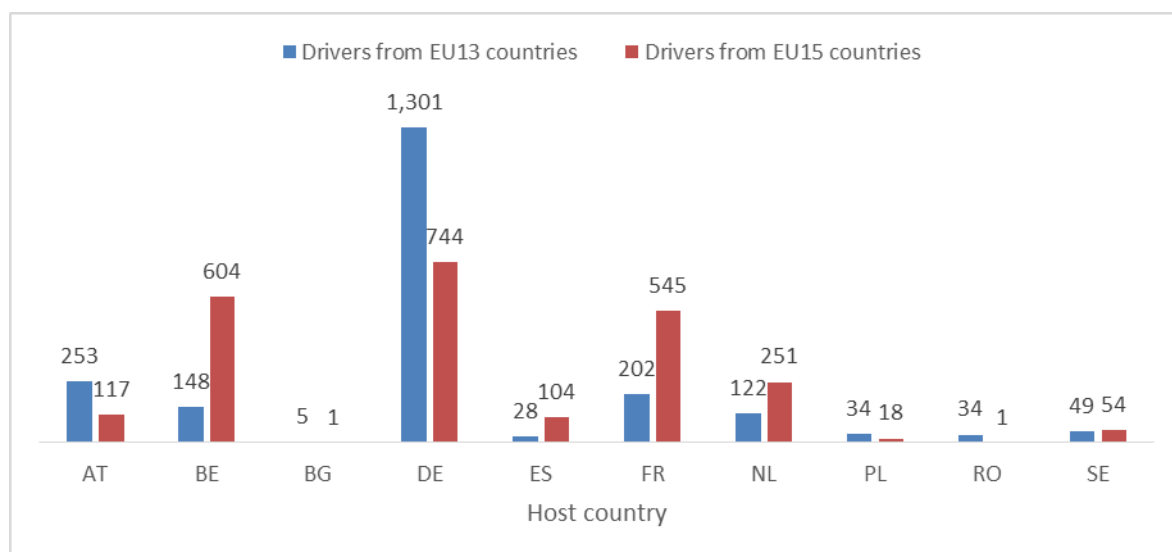
**Figure 5-3: Average probability of a driver spending 10 or more days in a given month in a selection of host countries in 2014/15**



Notes: Probabilities are split into the average probability for drivers from EU-13 and EU-15 countries, Source: (DTU, 2017)

Figure 5-4 shows the absolute number of trips per year where drivers spend more than 10 days in the host country. This changes the picture somewhat, because although EU-13 drivers have a higher probability of spending long periods away from home, the volume of activity (number of trips) that this is applied to tends to be much smaller for most countries. By far the largest number of trips can be observed for Germany with significantly more trips carried out by EU-13 drivers than EU-15 drivers. A high number of trips can also be observed for Belgium, France and the Netherlands. In these three countries more trips are carried out by EU-15 drivers than EU-13 drivers.

**Figure 5-4: Trips per year with periods away from home of 10 days or more in the base year 2014/15, split by EU-13 and EU-15 drivers [1000 trips]**



Notes: The annual number of trips is split into the average probability for drivers from EU-13 and EU-15 countries, Source: (DTU, 2017)

### **5.3.3.2. Step 2: projecting activity in the baseline out to 2035**

Projecting activity in the baseline is done in two steps:

- **Step 2a: Unadjusted baseline** - projecting future activity to account for developments in transport demand.
- **Step 2b: Adjusted baseline** - adjusting the baseline from step 2a to take into account the influence of additional costs (administrative and compliance – see Section 5.3).

#### **Step 2a: Unadjusted baseline - projecting activity to account for developments in transport demand**

In terms of estimating the evolution of periods away from home, there is no historical data that could be used to make extrapolations (the DTU study was the first of its kind). Therefore, the DTU data for 2014/15 was taken as the starting point, and indexed to projections of future transport activity (in Gt-km) for each host country from the 2016 EU Reference Scenario (European Commission, 2016a). This calculation is based on the assumption that the total number of relevant trips will grow in line with general trends in transport activity. The split between the trips of different durations is assumed to stay the same.

The projections of periods away from home given by indexing activity to overall projections in transport activity gives the unadjusted baseline.

#### **Step 2b: Adjusted baseline – adjusting the baseline to take into account the influence of the costs of minimum wage legislation**

While the PWD formally applies systematically across all EU Member States at least to all cabotage operations, evidence suggests that due to legal uncertainty the implementation is not efficient in many Member States. In the baseline, wage laws are assumed to thoroughly be applied currently in 4 Member States (Austria, France, Germany and Italy) and are assumed to be applied in 2018 in a further 4 Member States (Belgium, Denmark, Luxembourg and Sweden – as agreed with the Commission services). Data from the DTU study was only available for five of the countries assumed to implement wage rules (Austria, Belgium, France, Germany and Sweden), but nevertheless provides a good overview of the expected changes.

The efficient application of wage laws is expected to lead to significant increases in costs (administrative and compliance). These costs in turn are expected to lead to a reduction in the activity of foreign drivers compared to the unadjusted baseline (and hence a reduction in periods away from home). Therefore, we adjust the baseline to account for the cost responses.

The calculation of administrative and compliance costs is provided in detail in Section 5.3.5.2. Importantly:

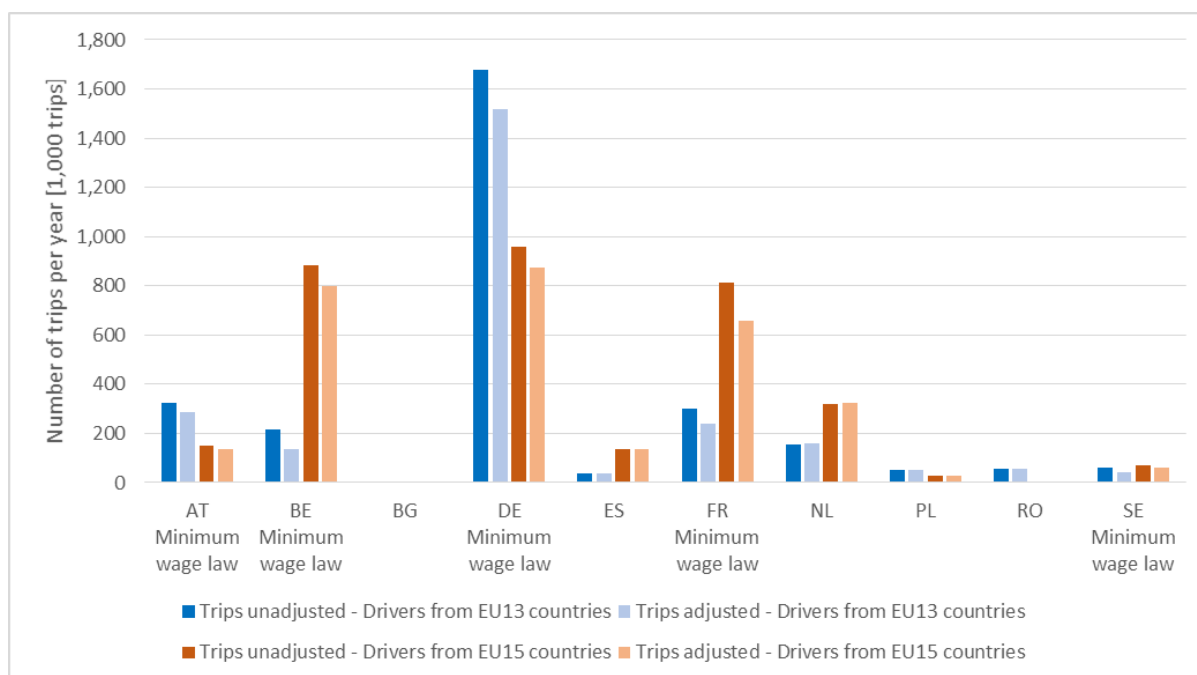
- The *administrative* costs (e.g. notifications, producing documentary evidence of driver wages) arising from the control measures are incurred for all drivers, regardless of whether or not they meet the wage requirements already, since they relate to activities that need to be carried out for all foreign drivers. These administrative requirements originate from the 2014 Enforcement Directive whose rules were agreed by the co-legislators.
- On the other hand, *compliance* costs (e.g. the additional wages that must be paid to drivers if they are not already paid the wage in the host country) are mainly incurred for drivers from lower-cost countries.

The process for making the cost adjustments is explained in detail in Section 5.3.5.2.

Figure 5-5 shows the number of trips by EU13 and EU15 drivers in the unadjusted baseline (i.e. where the impact of the introduction of minimum wage laws on activity

is not taken into account) and also in the adjusted baseline (taking into account the impact of changes in cost on transport activity). It can be seen that there are significant reductions in activity for countries that apply wage laws efficiently compared to the unadjusted baseline, due to the significant costs involved. Although EU-13 drivers are generally affected by additional compliance costs (i.e. adjustments to driver wages), the figures actually show higher reductions in trips for drivers from EU-15 countries (due to the higher labour costs in these countries, including for administrative staff, which leads to higher administrative costs for EU-15 drivers). There are of course no changes in the countries that do not apply wage laws systematically; however, these tend to be those countries that have smaller numbers of foreign drivers in any case.

**Figure 5-5: Trips per year with periods away from home of 10 days or more in 2035, split by EU13 and EU15 drivers [1000 trips]**



Source: DTU (2017) for baseline 2014/15, indexed to 2016 EU Reference Scenario

The calculations above showing high impact of administrative costs connected to wage laws on transport activity were also supported qualitatively by a range of national stakeholders that were consulted on the impacts of national minimum wage laws. For instance, the Austrian chamber of commerce WKÖ<sup>14</sup> reported a significant administrative burden connected to the laws in Germany and France and that as a consequence, some businesses already do not offer transport services to these countries anymore. A similar situation was reported by IRU<sup>15</sup>, who provided anecdotal evidence that one of their members who used to carry out operations in Austria and has now dropped activities in Austria due to the administrative burden of the introduction of the minimum wage law.

Similarly, (MTI, 2017) highlights that the minimum wage laws in Germany and France would lead to a significant reduction in the volume of cabotage services provided in these countries, and (TLP, 2016) warns of the high administrative costs leading to companies dropping out of the international market. Overall, the calculations, literature and stakeholder inputs all agree that the impact of the thorough application of wage laws will lead to significant reductions in international transport/cabotage – and hence, in periods away from home.

<sup>14</sup> Input provided by email on 19<sup>th</sup> January 2017 from WKÖ to DG MOVE

<sup>15</sup> Input provided by email on 16<sup>th</sup> March 2017 from IRU to DG MOVE

Other possible changes to the legal framework, such as changes **to Regulations 1071/2009 and 1072/2009** to reduce the level of letterbox companies and illegal cabotage may also have some, although probably more limited, impact on periods away from home.

#### **5.3.4. Levels of fatigue and risk**

To calculate the extent of driver fatigue in the baseline and under the proposed policy measures, we use a tool developed by the UK Health and Safety Executive (HSE) (HSE, 2006) – full details are given in Annex D.

The tool provides two outputs:

- The **Fatigue Index** is calculated as follows: expressed by an average probability multiplied by a high score value of 100, giving a value between 0 and 100. The high score is equivalent to a value of eight or nine on the Karolinska Sleepiness Scale (KSS), which is a nine-point scale ranging from one (extremely alert) to nine (extremely sleepy – fighting sleep). It has been extensively validated, and high scores are known to be associated with a high frequency of micro-sleeps.
- **Risk index:** expressed by the relative risk of an incident occurring on a particular shift. A baseline index of 1 represents the average risk derived from a two-day, two-night, four-off schedule involving 12-hour shifts starting at 8am and 8pm (DDNNRRRRR shift pattern). A value of two represents a doubling of the risk.

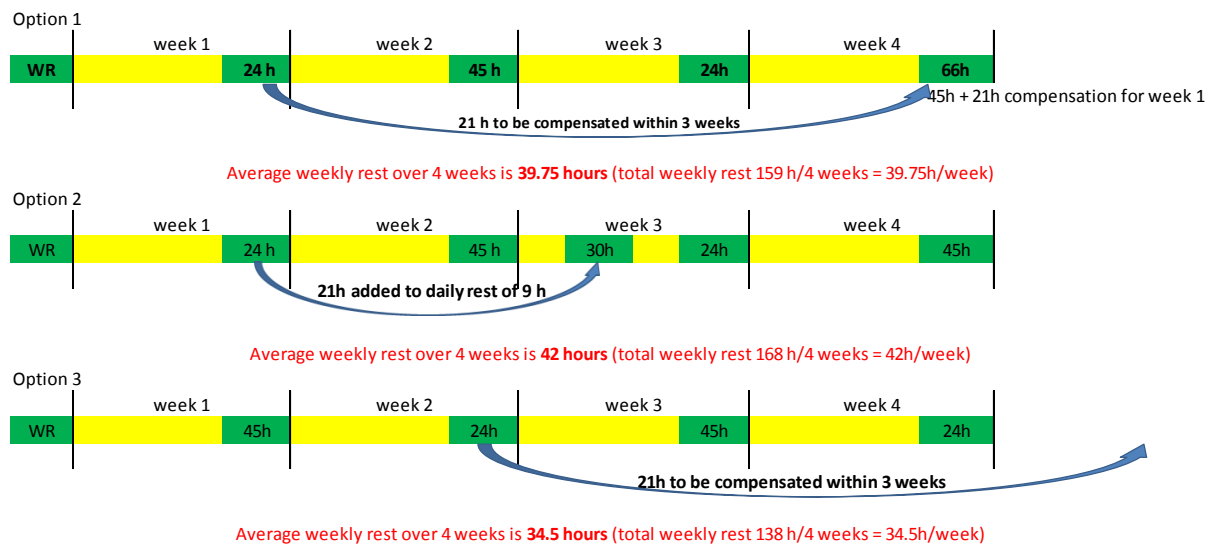
In general, in both cases a higher fatigue or risk index applies for the same type of work and of the same duration depending on the time of the day of the shift. Thus, all else been equal afternoon and, even more so, night shifts lead to higher levels of fatigue and risk index due to the interruption of the circadian rhythm. This reflects the results of various studies on the impact on fatigue and risk of incident that were reviewed for the development of the HSE tool (HSE, 2006).

A key limitation of these indices is that they are based on group/average data and do not take into account individual factors related to the driver (e.g. age), social factors (e.g. lifestyle, domestic responsibilities) or specific work-related issues (e.g. exposure to chemical hazards).

The baseline schedules represent the *maximum possible levels of fatigue and risk that could be expected under the current rules*. In practice, many drivers will have shorter working/driving times; however, the maximum levels were intended to provide a certain level of protection against excessive fatigue, and therefore this is the factor that is of most relevance for the policy comparison. That is, the maximum levels of fatigue and risk that can be achieved in the baseline versus the policy measures indicates the level of protection offered to drivers under the social rules.

Even when consistently applying the maximum driving times and working times, there are still multiple possible configurations for taking **weekly rest** within the current rules (due to the possibility of taking reduced weekly rest that will be compensated later on). In light of this, three options for weekly rest were set in the baseline, shown in Figure 5-6.

**Figure 5-6: Three example options for weekly rest that are possible under current rules (baseline)**



In relation to the provisions of the Working Time Directive additional specifications of the baseline were considered. This reflected the current rules regarding the calculation of working time using a 4 or 6 month reference period, meaning that a longer driving schedule was required to assess the long term effects of working cumulative 60-hour weeks. Furthermore, a constant regular weekly rest was assumed, as the compensation following reduced weekly rest makes it impossible to work 60 hours during the week of the compensation. These assumptions allow the creation of a work schedule that represents – within the limits of the Working Time Directive - the most extreme scenario with maximum number of working hours, and hence with the maximum fatigue and risk indexes, in the shortest possible number of weeks.

Finally, in order to analyse the impact of a combination of measures (namely measures 1 and 13) we used a 4-week baseline. Due to the high degree of complexity in weekly rest distribution, it was not possible to create options for weekly rest over the longer timeframes. This resulted in the following baselines being created:

- 4 month reference period - 16.8 weeks, where the driver works 13 consecutive 60-hour working weeks, followed by 1 week of 26 hours and 2.8 weeks of rest.
- 6 month reference period – 25.2 weeks, where the driver works 20 consecutive 60-hour working weeks, followed by 1 week of 10 hours, and 4.2 weeks of rest.

To add further sensitivity, both reference periods were modelled in two forms:

- Day scenario: with regular shifts starting at 8am.
- Night scenario: with varying shift times that result in some night work.

The detailed analysis is presented in Annex D.

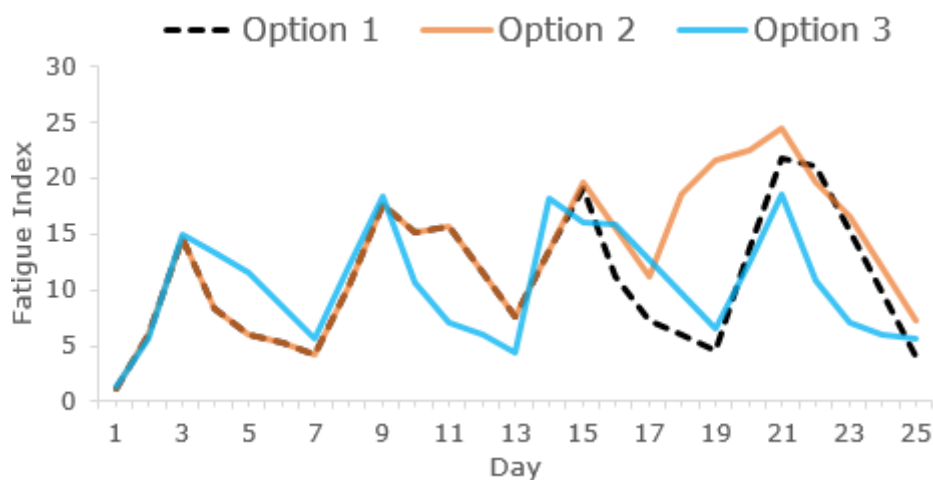
#### **5.3.4.1. Baseline levels of fatigue**

The three options outlined above were translated into driving schedules for input into the tool, which rise to the profiles for the fatigue index shown in Figure 5-7. The points given for each day reflect the fatigue index for the driving time duty period. The average fatigue index over the whole schedule for options 1, 2 and 3 respectively are: 10.6, 13.0 and 10.4.

The absolute level of fatigue itself is not a factor of primary interest for this study – rather, it is the change in fatigue index that could arise from the adoption of specific policy measures relative to this baseline that is important (as explored later). Nevertheless, as a rough benchmark, a maximum daytime fatigue index of 35 is considered good practice, and of 45 for night work (or combinations of day and night work) in order to mitigate risks of causing employee fatigue. These benchmarks apply

in general to service providers, especially with regard to split shift working, night time working and very long working times (Highways England, 2016).

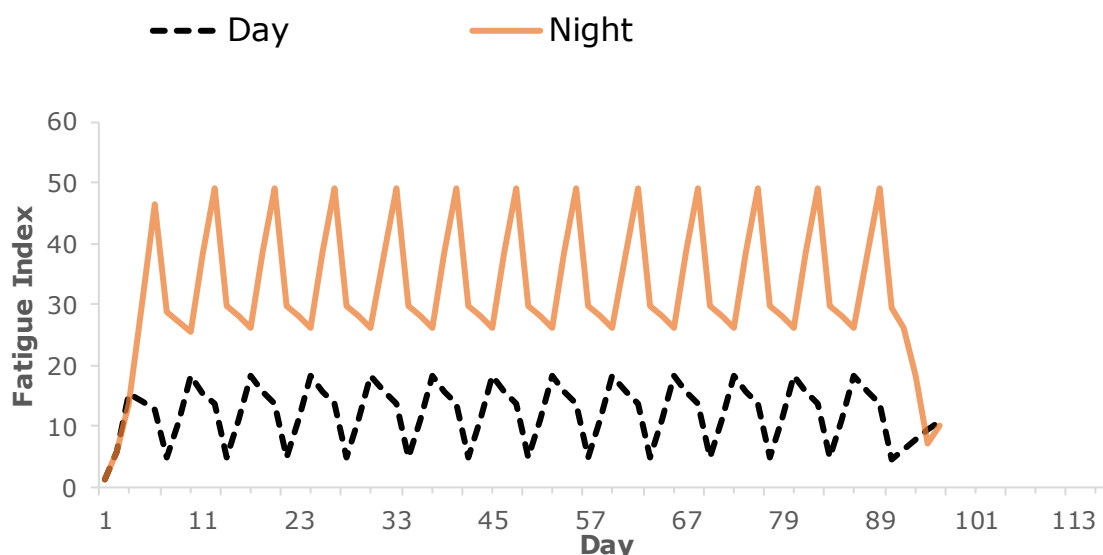
**Figure 5-7: Baseline fatigue indexes for three possible options for organisation of weekly rest**



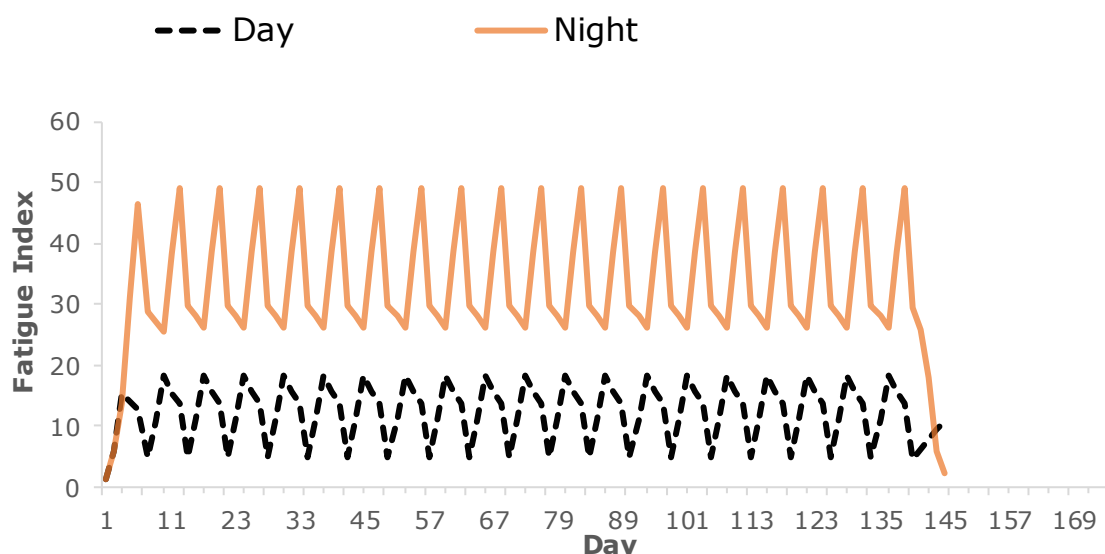
Source: Ricardo calculations using HSE tool (HSE, 2006)

The baseline specifications considered in a case of the Working Time Directive gave the fatigue index profile shown in Figure 5-8 and Figure 5-9. The average fatigue index over the whole schedule for the 4 month reference period are 12.9 in the day scenario, and 31.7 in the night scenario which, as indicated, generally leads to higher levels of fatigue for the same type of work. For the 6 month reference period, the average fatigue indexes are 12.3 in the day scenario, and 32.5 in the night scenario.

**Figure 5-8: Baseline 4-month fatigue index for day and night work scenarios**



**Figure 5-9: Baseline 6-month fatigue index for day and night work scenarios**

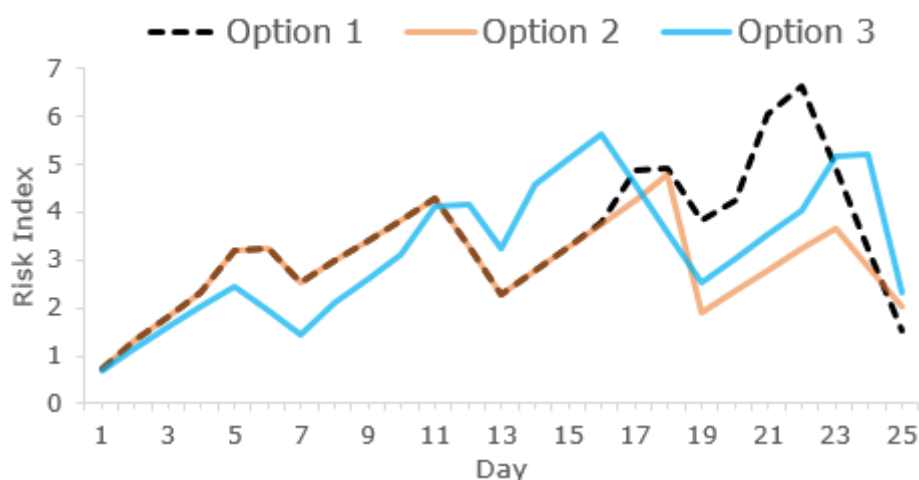


Source: Ricardo calculations using HSE tool (HSE, 2006)

#### 5.3.4.2. Baseline levels of risk

Figure 5-10 shows the baseline levels of risk under the three options. The average levels for options 1, 2 and 3 respectively are: 3.4, 2.9 and 3.2. The baseline scenarios exceed the recommended benchmark level of 1.6 (Highways England, 2016); however, guidance on the risk index suggests that high risk work undertaken by well-trained experts is still acceptable, in some circumstances. Even so, it is the comparison between these baseline results and the changes implied by the policy measures that is of most interest to this study.

**Figure 5-10: Baseline risk index for three options for the organisation of weekly rest**



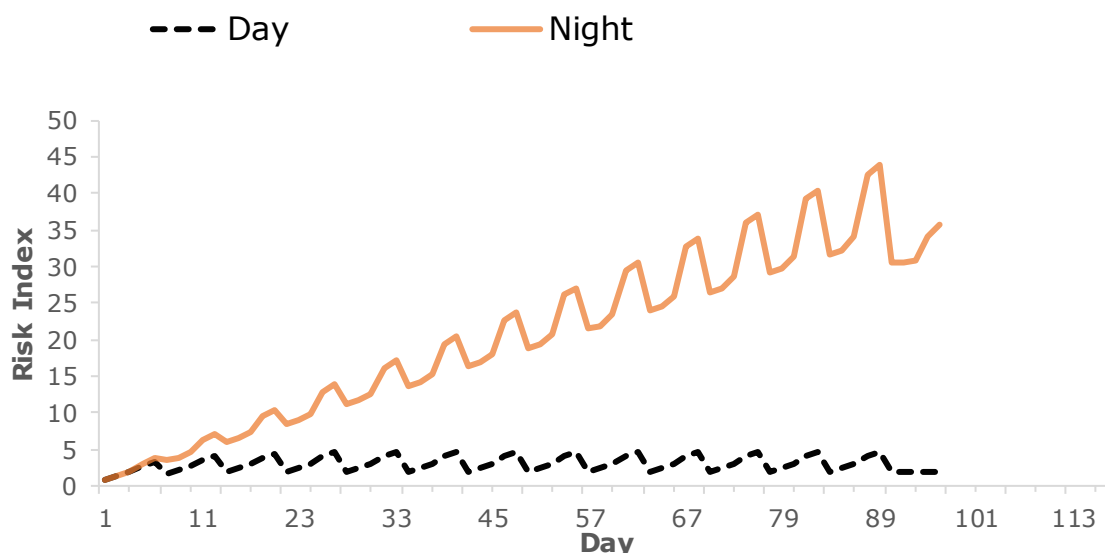
Source: Ricardo calculations using the HSE tool (HSE, 2006)

In the baseline scenario, it is assumed that there are no major changes to driver schedules in future, since there are no changes to the framework of the social legislation – hence, the fatigue and risk indices will remain as calculated above.

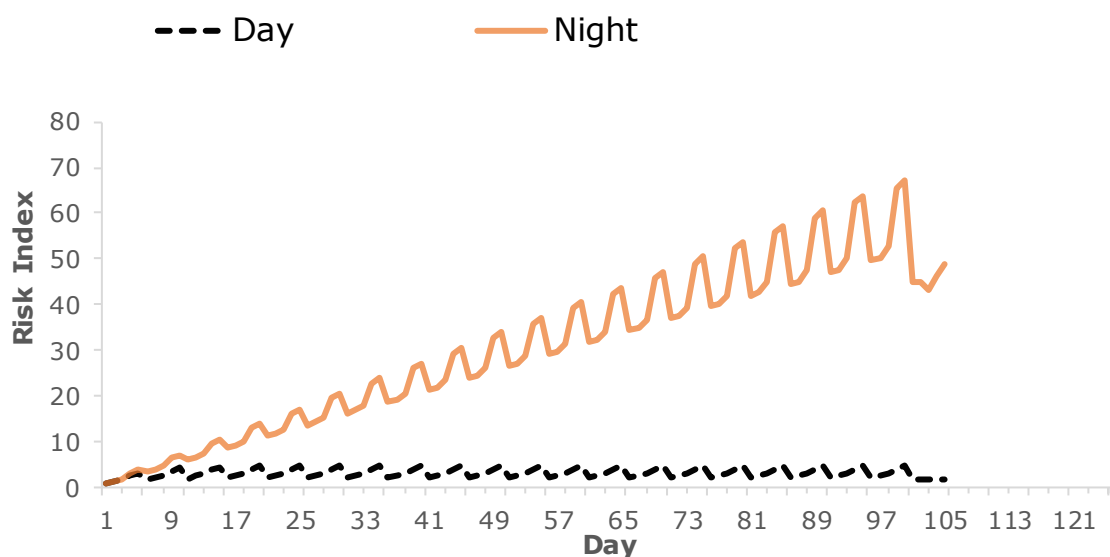
Figure 5-11 and Figure 5-12 also present the risk index profile in the case of the baseline specifications considered in a case of the Working Time Directive, covering reference periods of 4 and 6 months. The average risk index over the whole schedule for the 4 month reference period are 3.0 in the day scenario and significantly higher in

the case of the night scenario (20.1) due to assumed higher level of risk associated with night time shifts, particularly in the case of consecutive night time shifts, which is also reflected in the HSE model. For the 6 month reference period, the average fatigue indexes are 3.0 in the day scenario, and 30.1 in the night scenario.

**Figure 5-11: Baseline 4-month risk index for day and night work scenarios**



**Figure 5-12: Baseline 6-month risk index for day and night work scenarios**



Source: Ricardo calculations using the HSE tool (HSE, 2006)

### 5.3.5. Regulatory costs and savings

Concerning the administrative and enforcement costs linked for Members States and businesses are largely expected to remain unchanged in relation to most aspects of the legal framework. Certain aspects where possible changes should be expected. These concern:

- Volume and efficiency of enforcement activities;
- The adoption of national measures in relation to the posting of workers.

#### **5.3.5.1. Enforcement activities**

Ricardo et al. (2016) provides some estimates of the costs with reference to enforcement activity for the period 2011-2012, which were primarily associated with cost of enforcement staff – estimated in the range of €300-500 million on an annual basis.

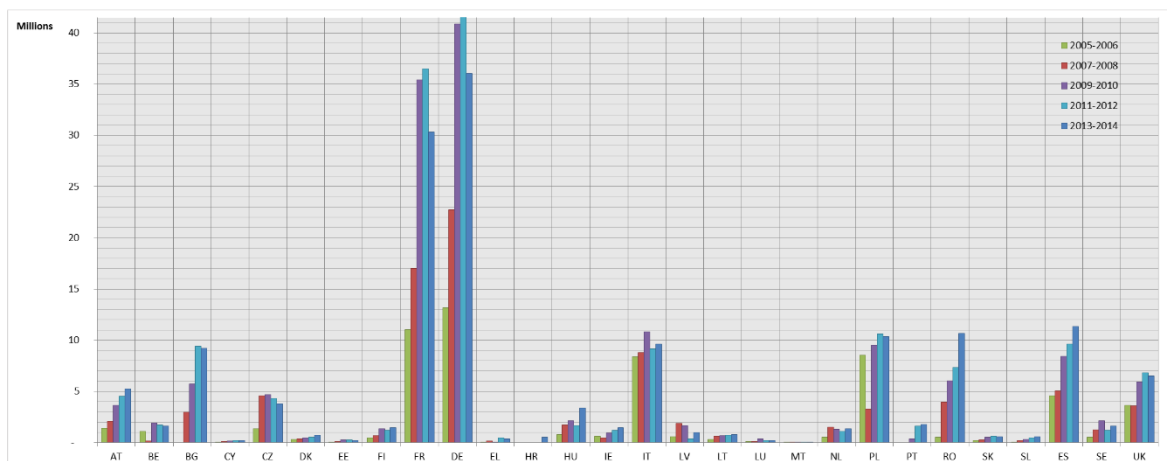
Costs for software and hardware equipment were estimated at around €45-50 million for the one-off costs of purchasing 12,000 control devices that were obtained in 2007. Annual costs for maintenance and replacement were not provided. In relation to the above, some additional costs should be expected to occur due to gradual digitalisation of the enforcement system that will require equipping controllers with control tools compatible with 'smart' digital tachographs, and to provide initial and continuous training. However, these costs were already taken into account in the impact assessment of the Tachograph Regulation, where the administrative burdens of compliance with road social rules were already identified as a problem. The net savings from the digital tachograph were estimated to be € 515.5 million in administrative costs for businesses, mainly due to improved tachograph functions requiring automated recording of location using GNSS (European Commission, 2011). At the same time, the efficiency of enforcement activities may improve over time on the basis of the use of digital tachographs driven by the requirements in the Tachograph Regulation. This should lead to cost savings for authorities and for businesses.

Other costs for authorities included the cost of training of enforcement officers. Ricardo (2016) estimated initial investment cost of €30m and ongoing costs of €12m for the EU-27 assuming that all enforcement officers undergo training.

Estimated costs for connecting with the TACHONet are not relevant since they have already been incurred. The annual maintenance costs were estimated at €1.7 million. Finally, total costs related to for monitoring and reporting of the application of driving and rest time rules was estimated at €7-8 million/year for the period 2011-2012, albeit with high uncertainty.

In terms of the evolution of enforcement activity, the analysis of data from the last available monitoring reports suggest that in the period 2013-2014 there was, for the first time, a small decline (5%) in the total number of working days checked over the previous period (European Commission, 2016b) (see Figure 5-13). This decrease was mainly due to a decline in roadside checks (24% decrease in the number of vehicles and 15% decrease in the number of drivers checked). However, with the exception of Greece, Netherlands and Croatia, the number of working days checked remained higher than the 3% threshold set by Directive 2006/22/EC. On the other hand, there was an increase in the number of drivers controlled at premises while the number of undertakings checked remained rather stable at around 147,000.

**Figure 5-13: Number of working days checked per Member State (roadside and premises)**



Source: 28<sup>th</sup> report on the implementation of the social legislation (European Commission, 2016b).

In terms of enforcement capacity, data on number of control officers involved in checks and units of equipment used available to control tachographs also suggest an overall decrease over the last reporting periods (see Table 5-2). A detailed analysis of data from the monitoring reports by Ricard (Ricardo et al, 2016) suggested that data were not reliable for all Member States and some Member States used different definition (for example, in Italy the number provided refers to hours worked). Among those Member States for which data are considered reliable, there is a total 13% decrease in the number of officers over the period 2013/14 and 2011/2012 that followed a decrease by 25% between 2011/12 and 2009/10. This is mainly driven by a decrease in the number of officers in Austria, France, Czech Republic and Hungary which is not counterbalanced by an increase in other Member States (UK, Lithuania). In most other Member State the changes were rather small (positive or negative). On the basis of the estimated annual costs of €300-500 million for the period 2011-2012 (Ricardo et al, 2016), a 13% decrease suggests a reduction to the costs for enforcement staff to €261-435 million on an annual basis.

**Table 5-2 – Evolution of enforcement capacity (in bold Member States for which data was considered reliable and complete)**

Member State	number of control officers involved in checks		
	2009/10	2011/12	2013/14
<b>AT</b>	<b>2,758</b>	<b>950</b>	<b>950</b>
BE	57	370	3,727
<b>BG</b>	<b>249</b>	<b>259</b>	<b>256</b>
HR			230
<b>CY</b>	<b>9</b>	<b>9</b>	<b>11</b>
<b>CZ</b>	<b>1,846</b>	<b>693</b>	<b>707</b>
<b>DK</b>	<b>60</b>	<b>60</b>	<b>110</b>
<b>EE</b>	<b>258</b>	<b>260</b>	<b>227</b>
FI	25	230	460
<b>FR</b>	<b>8,500</b>	<b>7,200</b>	<b>6,000</b>
DE	18,197	15,690	15,423
EL	93	2,518	3,279
<b>HU</b>	<b>604</b>	<b>289</b>	<b>135</b>
<b>IE</b>	<b>14</b>	<b>12</b>	<b>12</b>

Member State	number of control officers involved in checks		
	2009/10	2011/12	2013/14
IT	316,788	35,363	10,569
<b>LV</b>	<b>15</b>	<b>19</b>	<b>18</b>
<b>LT</b>	<b>249</b>	<b>788</b>	<b>657</b>
<b>LU</b>	<b>100</b>	<b>54</b>	<b>27</b>
<b>MT</b>	<b>8</b>	<b>2</b>	<b>3</b>
<b>NL</b>	<b>317</b>	<b>200</b>	<b>200</b>
PL	2,040	1,587	1,265
PT	-	4,271	14,898
RO	346	661	318
<b>SK</b>	<b>48</b>	<b>45</b>	<b>40</b>
<b>SI</b>	<b>426</b>	<b>375</b>	<b>341</b>
ES	-	470	500
SE	100	251	231
<b>UK</b>	<b>280</b>	<b>616</b>	<b>617</b>
<b>Total for 17 selected MS</b>	<b>15,732</b>	<b>11,822</b>	<b>10,300</b>

Source: 28<sup>th</sup> report on the implementation of the social legislation (European Commission, 2016b).

Thus, recent data on both enforcement activity a reverse to the earlier growing trends in the level of total enforcement activity (working days checked presented in Figure 5-13) together with a decline in enforcement capacity. However, it is not possible to establish whether this represents a long term trend.

At the same time, almost all Member States are well above the minimum 3% threshold which is expected to increase to 4% once 90% of vehicles are equipped with digital tachographs. Furthermore, according to the data from the 2013-2014 monitoring report, the share of vehicles checked with digital tachographs was, on average, 62%. With an average replacement period of trucks used for hire and reward operators of 8 years<sup>16</sup>, it should be expected that the 90% threshold will be reached by 2026 in the absence of any other measure promoting the use of tachographs. Taking also into account the expected growth in road freight and passenger transport projected in the 2016 EU Reference Scenario (European Commission, 2016a)<sup>17</sup> we can assume that, in the medium-long term, the current declining trends should be counterbalanced. Thus, for the purposes of this analysis we have assumed that enforcement activity and resources will remain largely stable over the period under consideration.

With the exception of rules for posting (see analysis below in section 5.3.5.2) the same assumption on rather stable costs should apply to administrative costs for businesses. According to the (Ricardo et al, 2016), the annual costs for registering data on driving and rest times were estimated at €61 million for the 3.1 million vehicles with digital tachographs and €51 million for the 1.4 million vehicles with analogue tachographs. Other costs - related to the purchase of equipment for the vehicles - of €943.5 million were mainly one-off costs that were incurred at the time of the adoption of Regulation 261/2006. Annual maintenance costs and costs for updating hardware and software were not estimated but should only be a small fraction of the above costs.

<sup>16</sup> The average age of heavy duty vehicles in 2009 was 8.13 years (European Environment Agency, 2016).

<sup>17</sup> Annual growth rate over the period 2020-2030 of 0.6% for passenger transport and 1.5% for road freight

From the point of view of businesses, costs of compliance with the existing EU rules are expected to slightly increase due to persisting diverging implementation of the rules (Driver 4), illegal activities and increasing cost-based competition, which will make it more difficult for operators to keep up their activities in compliance with the rules. Cost of complying with proliferating national measures should further increase regulatory burdens on operators.

In terms of the costs of non-compliance, on the basis of the estimated level of infringements against the EU social rules in road transport of 1.6 million detected infringements per year for the period 2013-2014 according to the 28<sup>th</sup> monitoring report (European Commission, 2016b) and taking into account the average fines imposed (Ricardo et al, 2016), non-compliance costs can be estimated at €14.5 million per year. The data from the report also show a decline in the number of offences detected (15% over the previous reporting period) which could suggest a slight gradual decline in the levels of non-compliance but may also be linked to a decrease to the overall enforcement effort reported earlier.

#### **5.3.5.2. Costs related to national measures for posting of workers**

The costs resulting from the posting of workers arising for operators include:

- **Administrative costs<sup>18</sup>:** these include all paperwork connected to posting a driver e.g. maintaining extra records of working time, notifications to the host country (these administrative costs are arising from the 2014 Enforcement Directive). Also the costs for establishing a local representative (in France) or a contact person in the country (in Italy) is included in the administrative costs.
- **Compliance costs<sup>19</sup>:** for posting operators from Member States where the actual remuneration is lower than the minimum remuneration in the host country, compliance costs arise from matching the driver's remuneration to the minimum requirements (i.e. the additional wages that must be paid to posted drivers).

These costs are used to inform the analysis of total costs to businesses in the baseline. Since the additional costs are quite substantial, there is likely to be an impact on transport activity – the analysis is therefore conducted in several steps:

- **Step 1:** Calculate unit costs for administrative costs.
- **Step 2:** Calculate costs of compliance (minimum wages).
- **Step 3:** Calculate the total unadjusted costs (administrative and compliance), which do not take into account the impact of the increased costs on the distribution of transport activity (i.e. the number of trips is not adjusted to take into account the influence of the additional costs).
- **Step 4:** Calculate adjusted costs (administrative and compliance), in which the amount of activity is adjusted to take into account the influence of the additional costs using price elasticities.

#### **Step 1: Calculate administrative costs**

As indicated in Section 5.3.1.2, currently, wage laws are assumed to be applied and thoroughly enforced in four Member States (Austria, Germany, France, and Italy) together with associated administrative and control requirements. By 2019 a further four Member States are expected to introduce effective wage laws (Belgium, Denmark, Luxembourg, Sweden).

---

<sup>18</sup> Here defined as any administrative labour connected to the PWD. Compliance costs on the other hand only include costs arising from differences in remuneration.

<sup>19</sup> In the context of this study for compliance costs we are only considering costs arising for operators due to the differences in remuneration.

As indicated in the problem definition section (Annex A), industry representatives from the Czech Republic, Austria and Poland report significant **administrative costs** for hauliers as a result of these provisions. The administrative requirements are summarised in Table 5-3.

**Table 5-3: Administrative requirements for road transport operations in connection with minimum wage legislation**

MS	Minimum period before requirements apply (type of operations covered)	Administrative requirements
AT	First day (international and cabotage)	<ul style="list-style-type: none"> <li>- Maintain separate working time records and social security documentation for workers carrying out transport operations on the territory of Austria,</li> <li>- Submit prior detailed notification of each future posting operation</li> <li>- Appoint contact person, responsible to keep the work-related documents and provide information to control authorities in Austria.</li> <li>- The required documentation shall be made available in German language.</li> </ul>
IT	First day (only cabotage operations)	<ul style="list-style-type: none"> <li>- Submit prior notification of a number of details of the future posting operation,</li> <li>- Keep records for 2 years with an employment contract translated into Italian, relevant payslips and evidence of wage transfers for posted workers,</li> <li>- Designate contact person domiciled in Italy</li> </ul>
DE	First day (international and cabotage)	<ul style="list-style-type: none"> <li>- Submit a deployment schedule which may cover a period of up to six months including the start and expected duration of the work or service provisions, information on workers deployed and the address at which documentation is to be made available on request by German authorities.</li> <li>- Assurance attached to the deployment schedules stating that, at the request of the customs authorities, documentation will be made available for examination in Germany and in German language.</li> <li>- Submit written notification in German language to customs authorities before any work or service is carried out.</li> <li>- Employers domiciled abroad must keep a German language version of the documentation required (contract, payslips, time sheets, proof of payment) for demonstrating compliance with the terms of employment for at least two years.</li> </ul>
FR	First day (international and cabotage)	<ul style="list-style-type: none"> <li>• Submit attestation of posting covering 6 months period and including several details concerning the company, the posted worker(s), information on the social security, labour law applicable, salary, etc.</li> <li>• Establish representative on the territory of France who shall keep for control purposes all documents of posted workers translated into French.</li> <li>• Representative shall be available for controls for the whole period of posting and 18 months after.</li> <li>• Drivers must carry on board the vehicle the French versions of employment contract and the posting declaration.</li> </ul>

Source: Commission services (European Commission, 2017)

The available data on administrative costs was extremely sparse – even though as previously mentioned, stakeholders indicated that there were high costs, few were

able to elaborate further. The most complete data for quantifying the administrative costs was provided by industry representatives from the Czech Republic (summarised in Table 5-4 ), who estimated administrative costs for Czech drivers operating under the German and French minimum wage laws. This includes the following administrative tasks:

- Maintaining extra records of working time;
- Gathering and collating information on transport contracts, breaking down journeys into outward, return and transit;
- Creating special payslips with separate remuneration for every country;
- Gathering and archiving the payment orders used to pay wages;
- Documentation of deductions from pay, such as amounts claimed back, which results in a second payroll with the addition of extra items to cater for the specific features and requirements of Germany and France.

**Table 5-4: Data on administrative costs for drivers from the Czech Republic**

ID	Parameter	Host country		Calculation	Source
		DE	FR		
Admin costs (paperwork etc.)					
a	Admin staff per driver	0.1	0.1	-	CZ association estimate
b	Cost of 1 admin staff per month (CZK)	40,000	40,000	-	CZ association estimate
c	Exchange rate (CZK/EUR)	0.037	0.037	-	<a href="http://www.xr.com">www.xr.com</a>
d	Cost of 1 admin staff per month (EUR)	1,480	1,480	= b * c	Calculation
e	Admin cost per driver and month (EUR)	148	148	= d * a	Calculation
f	Average number of international + cabotage trips per truck and month, Median	7.55	assumed to be the same as for DE	-	Calculations based on (DTU, 2017). Data only available for DE
g	Number of drivers/truck	1	1	-	2013/14 social legislation official monitoring data <sup>20</sup>
h	Admin cost/trip	19.6	19.6	= (e/f)g	
Local representative cost (FR only)					
i	Cost per driver/month (CZK)	n/a	4,200	-	CZ association estimate
j	Cost per driver/month (EUR)	n/a	155.4	= i*e	Calculation
k	Local rep cost/trip (EUR)	n/a	20.6	= (j/f)*g	
Total admin + local rep cost (EUR)		19.6	40.2	= h + k	

Input from other industry associations suggests that the values provided by the Czech associations are at the higher end of the spectrum and might overestimate the administrative costs.

<sup>20</sup> The 2013-2014 monitoring data (European Commission, 2016b) provides the number of checks in each country in terms of both the number of drivers and number of vehicles. This shows that the median across all EU Member States is 1 driver per truck.

The only other data that we received, which is exactly comparable to the Czech values is information received from an Austrian industry association, who estimate the administrative costs connected to the minimum wage laws as €7.00 per trip. We used this data to adjust the Czech values downwards to a potentially more broadly representative value. To be able to calculate an average value for Czech and Austrian data, we adjusted the Czech estimates using data on the total labour costs for administrative and support service activities from Eurostat<sup>21</sup>. The calculations are outlined below:

**Table 5-5: Administrative costs for DE as host country [€/trip]**

	<b>CZ data</b>	<b>AT data</b>	<b>Average used</b>
<i>Raw data</i>	19.60	7.00	-
<i>Adjusted to CZ wage level</i>	19.60	1.85	<b>10.72</b>

No estimate of the cost for a local representative in France was provided in the Austrian data, but it was suspected that the Czech estimates could be similarly at the high end of the spectrum. Therefore, the Czech estimate of €20.58 per trip was adjusted downward by the same ratio as the average cost per trip (i.e.  $10.72/19.60 = 55\%$ ). This gave a lower estimate of €11.26 per trip that was used in subsequent calculations.

These adjusted values for administrative costs for Czech operators connected to minimum wage laws were then amended to take into account differences in the level of labour costs in the different countries. We have indexed the relevant part of the Czech estimates using data on the total labour costs for administrative and support service activities from Eurostat<sup>22</sup>. A further assumption is that the administrative costs are the same regardless of whether the posted driver already complies with the minimum wage law in the host country, since the company would still need to carry out the required administrative tasks such as notification, providing appropriate evidence etc.

Table 5-6 provides the administrative costs by posting country for different host countries applying minimum wages. We assumed the same administrative costs as calculated for Germany would also apply in the host country Austria and from 2020 also in Belgium, Luxembourg, Sweden, Denmark. For Italy, we used the administrative costs as calculated for France (albeit only applying to cabotage trips) from day one.

**Table 5-6: Administrative costs [€/trip]**

<b>Sending country</b>	<b>Host country</b>	
	<b>DE = AT = BE = LU = SE = DK</b>	<b>FR = IT (includes local representative / contact person in the country)</b>
Austria	41	83
Belgium	55	112
Bulgaria	5	9
Croatia	10	20
Cyprus**	18	36
Czech Republic	11	22
Denmark	59	120
Estonia	15	31
Finland	38	79

<sup>21</sup> (Eurostat, 2016a) - Labour cost levels by NACE Rev. 2 activity [lc\_lci\_lev])

<sup>22</sup> Ibid.

Sending country	Host country	
	DE = AT = BE = LU = SE = DK	FR = IT (includes local representative / contact person in the country)
France	44	91
Germany	34	70
Greece*	17	35
Hungary	11	22
Ireland	36	75
Italy	32	65
Latvia	10	21
Lithuania	10	20
Luxembourg	35	72
Malta	18	37
Netherlands*	39	79
Poland	11	22
Portugal**	14	29
Romania	6	13
Slovakia	12	24
Slovenia	19	38
Spain	25	52
Sweden	53	108
United Kingdom	37	77

Notes: The additional costs for a local representative are assumed to apply only in France.

Source: Calculations based on Eurostat 2015 data on labour costs for administrative and support service activities from Eurostat (Labour cost levels by NACE Rev. 2 activity [lc\_lci\_lev])

\*based on 2014 value

\*\* based on 2012 value

There are a number of limitations to the above estimates that should be taken into account:

- Firstly, the data provided by two associations is potentially biased / not representative of other EU countries. This data was the most complete available to us and hence considered the best basis for making extrapolations to other countries.
- The cost estimates do not include the extra work in the event of inspections or changes in the planning of drivers' shifts, which the CZ association suggests would be extra administrative work. The estimates may therefore be a lower-bound.

To convert the administrative costs per driver to administrative costs per trip we have used data provided by (DTU, 2017) on the average number of international and cabotage trips per truck and month for Germany. The EU median was calculated for international and cabotage trips from drivers across all EU Member States which are carried out in Germany. Due to the lack of such detailed data for other host countries, the same average number of international and cabotage trips per truck and month was assumed for France, which is likely to be different in reality.

## Step 2: Calculate compliance costs

Besides the administrative costs, there may also be **compliance costs for operators** in cases where the 'home' country average pay of a driver is *lower than* the minimum

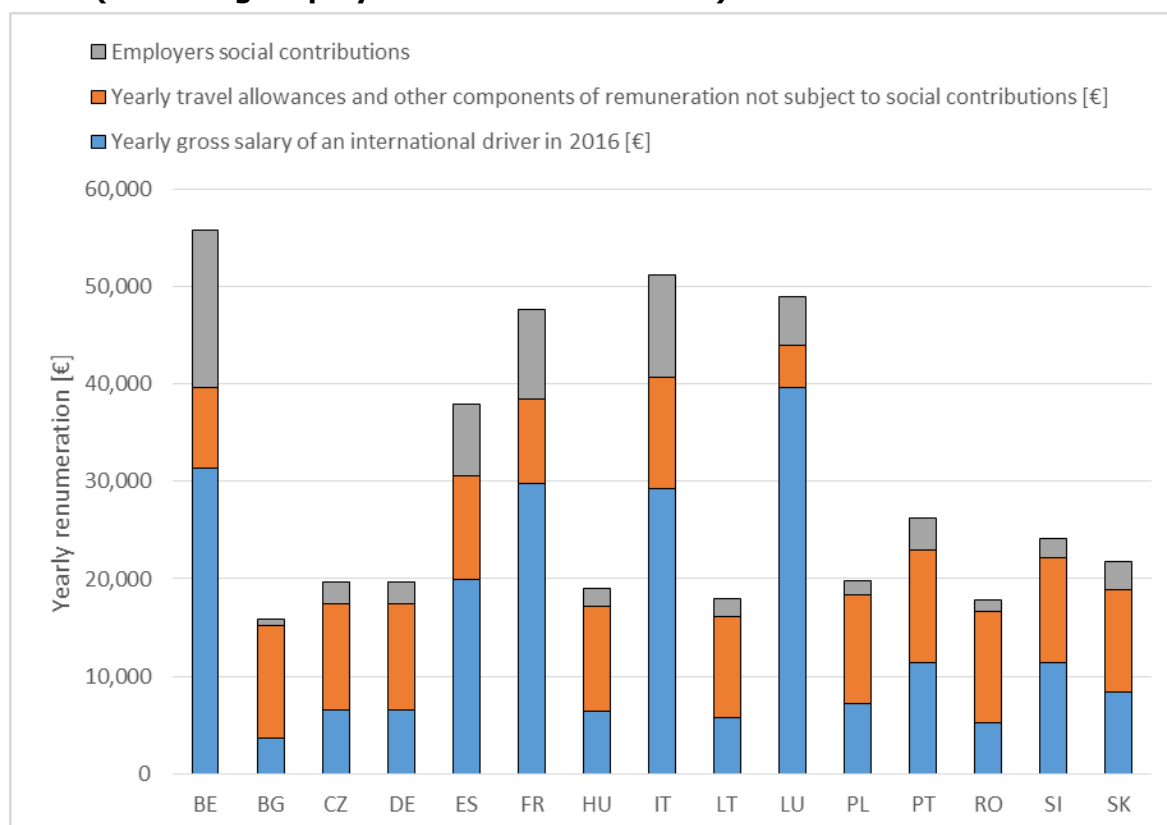
pay rate in the 'host' country. Where this occurs, employers will be obliged to increase their drivers' remuneration during the period that the driver operates in the host Member State to meet the minimum requirements. In cases where drivers already receive at least the minimum pay rate, no adjustments to wages will be required.

According to the PWD, Directive 96/71/EC, Article 3 (1) posted workers should be entitled to the following in the 'host' Member State:

- a) Maximum work periods and minimum rest periods;
- b) Minimum paid annual holidays;
- c) The minimum rates of pay, including overtime rates; this point does not apply to supplementary occupational retirement pension schemes;
- d) The conditions of hiring-out of workers, in particular the supply of workers by temporary employment undertakings;
- e) Health, safety and hygiene at work;
- f) Protective measures with regard to the terms and conditions of employment of pregnant women or women who have recently given birth, of children and of young people;
- g) Equality of treatment between men and women.

Detailed data on drivers' actual remuneration was taken from (CNR, 2016). Data is provided for yearly gross salary of an international driver, yearly travel allowances and other components of remuneration (not subject to social contributions), and the employer's social contributions. To be in line with the Posting of Workers Directive's outline of the minimum remuneration, we only consider the former two labour cost components (i.e. excluding the employer's social contributions) for our analysis as this will be the part of the remuneration that will be affected by changes under PP4. It should be noted however, that the employers' social contribution can be substantial in some cases (e.g. Belgium, Spain, France, Italy as shown in Figure 5-14. Data on the gross salary and other remuneration components is available for 16 EU Member States (Belgium, Bulgaria, Czech Republic, Germany (East and West), Spain, France, Hungary, Italy, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovenia, Slovakia).

**Figure 5-14: Structure of remuneration of an international truck driver in 2016 (excluding employer's social contribution)**



Source: CNR (2016)

To convert the yearly remuneration into a daily value we divided by the average number of days worked per year, retrieved from the 2013/14 monitoring data (European Commission, 2016b).

To fill the data gaps so that all EU Member States are covered, we have indexed the remuneration values using labour costs data in the transport and storage sector from Eurostat (Labour cost levels by NACE Rev. 2 activity [lc\_lev]) using EU-15 and EU-13 averages. Table 5-7 shows the average actual daily remuneration in Euros per day.

**Table 5-7: Daily actual remuneration without employer's social contribution**

Country	Average actual daily remuneration [€/day]
Austria	159
Belgium	171
Bulgaria	60
Croatia	90
Cyprus	175
Czech Republic	78
Denmark	205
Estonia	102
Finland	162
France	173
Germany	145
Greece	102
Hungary	68
Ireland	150

Country	Average actual daily remuneration [€/day]
Italy	204
Latvia	71
Lithuania	64
Luxembourg	195
Malta	No data
Netherlands	156
Poland	81
Portugal	96
Romania	77
Slovakia	87
Slovenia	103
Spain	139
Sweden	180
United Kingdom	153

Source: Ricardo calculations based on (CNR, 2016) and Eurostat (Labour cost levels by NACE Rev. 2 activity [lc\_lci\_lev])

For the *minimum* remuneration that a driver would be entitled to in the different host countries, the data is limited. (TLP, 2016) provides such data for Belgium, France, Germany, Italy, Spain and The Netherlands. We have compared this data with minimum wage data available from (MTI, 2017) , which is based on Eurostat minimum wage data. To be able to adjust the minimum wage data upwards in order to take other remuneration components into account we have calculated the median of the percentage difference between minimum remuneration from TLP and this minimum wage data. This median percentage was then applied to the minimum wage values of the missing Member States. The calculated minimum remuneration figures are shown in Table 5-8.

**Table 5-8: Minimum remuneration by host country**

Host country	Minimum daily remuneration [€/day]
Austria	99
Belgium	152
Bulgaria	14
Croatia	29
Cyprus	69
Czech Republic	25
Denmark	186
Estonia	30
Finland	125
France	106
Germany	94
Greece	50
Hungary	26
Ireland	122
Italy	73
Latvia	28
Lithuania	23

Host country	Minimum daily remuneration [€/day]
Luxembourg	151
Malta	57
Netherlands	119
Poland	30
Portugal	45
Romania	16
Slovakia	29
Slovenia	60
Spain	69
Sweden	140
United Kingdom	114

Source: Ricardo calculations based on MTI (2017)

### Step 3a: Total costs – unadjusted

As noted earlier in Section 5.3.3 on periods away from home, the level of transport activity will be affected by the costs incurred. The calculation of total costs is therefore done in two steps: firstly, the unadjusted costs in Step 3, and then the adjusted costs in Step 4.

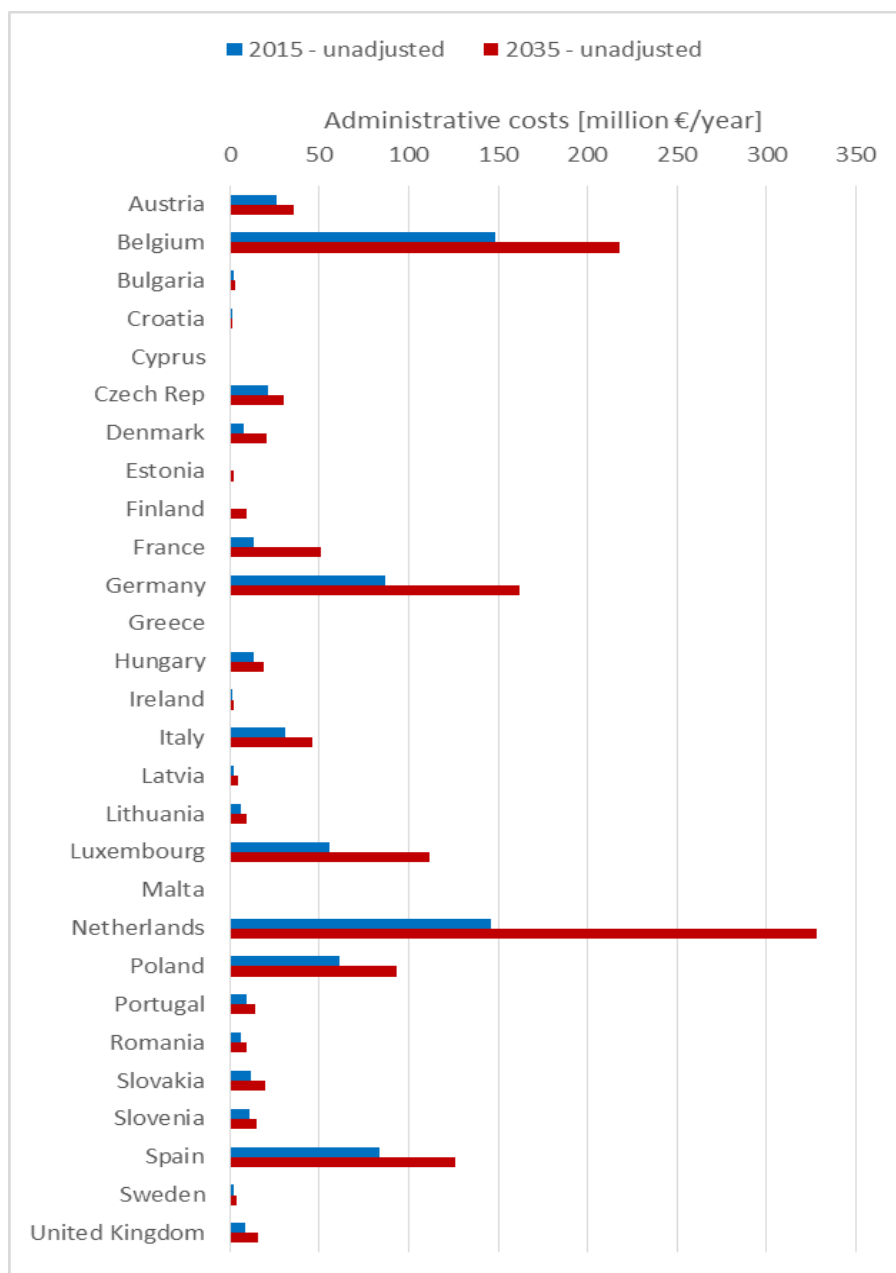
### Administrative costs

To calculate the annual administrative costs per posting Member State due to minimum wage laws, we used data on trips by posting country and host country combination, from (DTU, 2017). In order to take into account the evolution in the number of trips in future years, the number of trips were adjusted by indexing to the EU Reference Scenario 2016 data on freight transport activity (Gt-km) – see Section 5.3.3.2.

By multiplying the annual number of trips for both cabotage and international transport with the administrative costs per trip estimated earlier, we obtain the annual administrative costs for Member States that have minimum wages laws in place in the baseline. The DTU dataset does not provide information for the host countries Denmark, Italy and Luxembourg.

Figure 5-15 gives an overview of the annual administrative costs by posting Member State, summing administrative costs across all hosting countries with minimum wage laws in place. The annual administrative costs are presented for the base year of 2014/15 (minimum wage laws in Austria, Germany, France) and 2035 (additional minimum wage laws in Belgium and Sweden). It can be seen that administrative costs increase significantly for all posting countries between 2015 and 2035, partly due to the projected increases in activity in line with the Reference Scenario, but mostly due to the introduction of the minimum wage laws in the four extra countries from 2019.

**Figure 5-15: Annual administrative costs (in 2015 values) by posting country summed up across all host countries that apply minimum wages in the baseline (AT, DE, FR from 2015, BE, SE after 2019) - UNADJUSTED**



Source: Ricardo calculations based on DTU (2017) data and administrative cost data provided by Czech and Austrian industry representatives

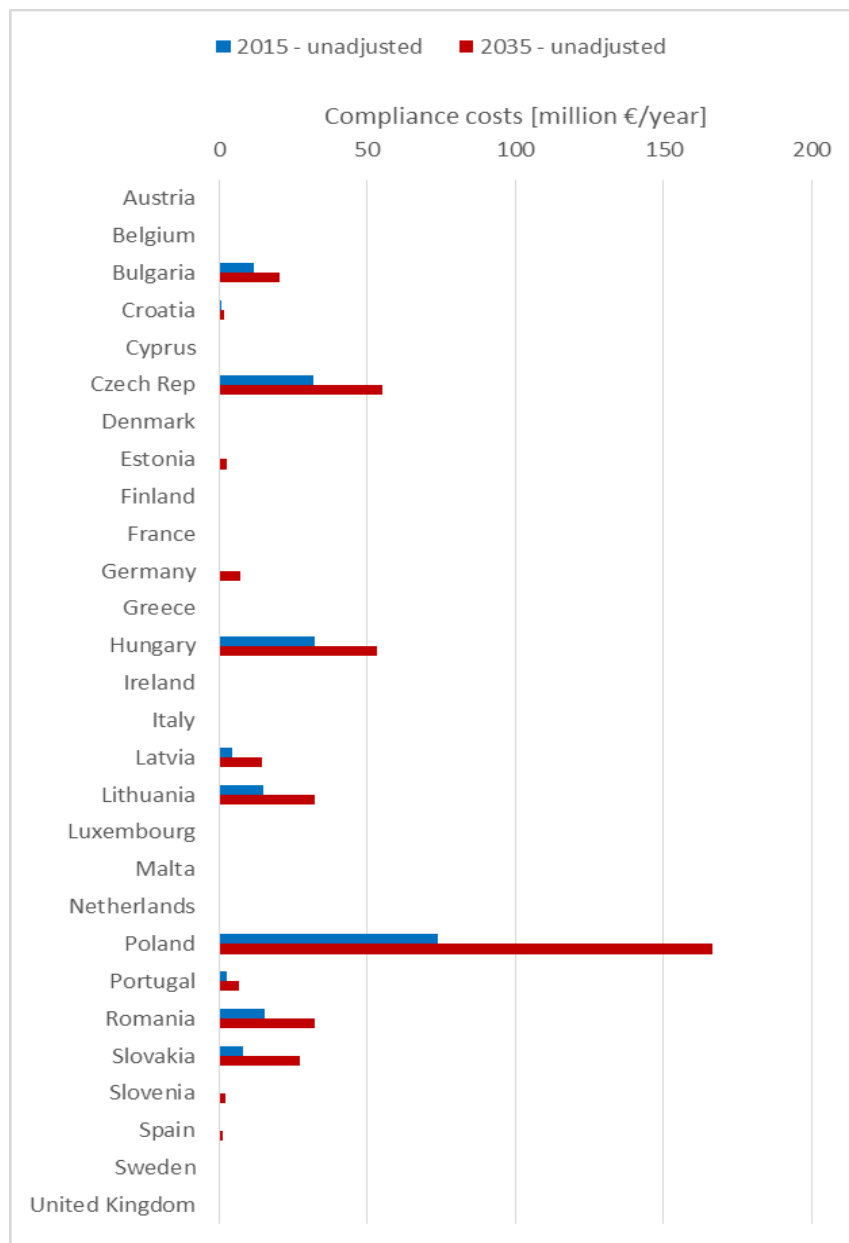
Total unadjusted administrative costs in 2015: 756 million€/year; Total unadjusted administrative costs in 2035: 1,349 million€/year

### Step 3b: Total compliance costs - unadjusted

For each host country and posting country combination, we compared the actual driver's remuneration with the host countries minimum remuneration. In the cases where the actual driver's remuneration is already higher than the minimum remuneration, the compliance costs were set to zero (since no adjustments would be required). In all other cases the difference is used to calculate the annual compliance costs (in terms of adjustment to drivers' wages). Again we used the data provided by DTU (2017) on annual trips per host and posting country combination to calculate the annual compliance costs. In order to convert the cost per driver day to costs per trip we have assumed that the ratio driver day to trip is one. Figure 5-16 shows the

compliance cost for each posting country for activities across all host countries. As before, the costs increase for all posting countries due to the introduction of minimum wage laws in additional countries and the projected increase in transport activity.

**Figure 5-16: Annual compliance costs (in 2015 values) by posting country summed up across all host countries (AT, DE, FR from day one, BE, SE after 2019) - UNADJUSTED**



Source: Ricardo calculations based on DTU (2017) data, CNR (2016) and TLP (2016)

Total unadjusted compliance costs in 2015: 196 million€/year; Total unadjusted compliance costs in 2035: 423 million€/year

#### Step 4: Total administrative and compliance costs – adjusted

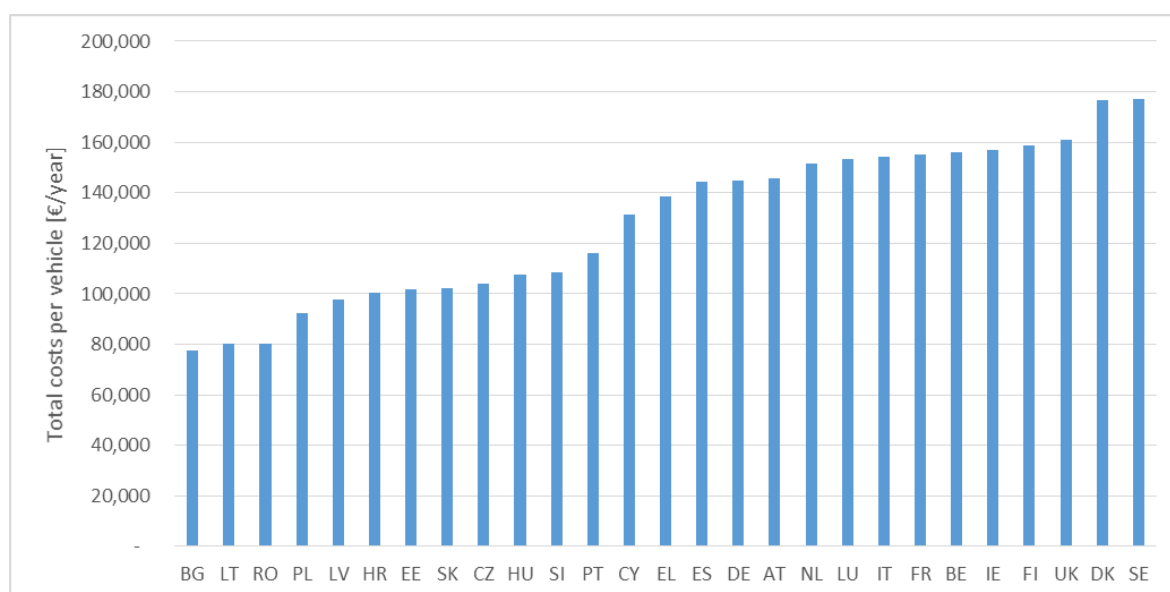
Our analysis has shown that the administrative costs are significant, and as noted previously this appears to be in line with qualitative and quantitative inputs from industry stakeholders. It therefore has to be assumed that this increase in cost will lead to a reduction in trips to the host countries with minimum wage legislation.

This reduction is calculated using an elasticity. In line with (Significance et al, 2010), a t-km elasticity of 1.0 is used, meaning that a 10% increase in costs would equal a 10% reduction in t-km, assuming that costs would be passed through to the

customers. Total transport activity is driven by GDP and is therefore assumed to be constant. We do not have data to indicate exactly how the activity would be displaced – it is possible that trips would be transferred to domestic operators or other operators that would previously have lost out to low-cost competition. It is also possible that some trips through countries that thoroughly enforce wage laws would be re-routed through other countries that do not apply such legislation. For the purposes of calculating administrative and compliance costs, it is not necessary to make assumptions on the exact mechanism through which the trips are reduced.

To calculate the relevant percentage increase in costs per trip, the additional administrative costs plus compliance costs were compared to the total average running costs of a truck. The latter we obtained from the model developed for the Study to support the Impact Assessment for the revision of road haulage legislation and are presented in the table below.

**Figure 5-17: Total operating costs per vehicle and year by EU Member State**



Source: Ricardo et al. (2017)

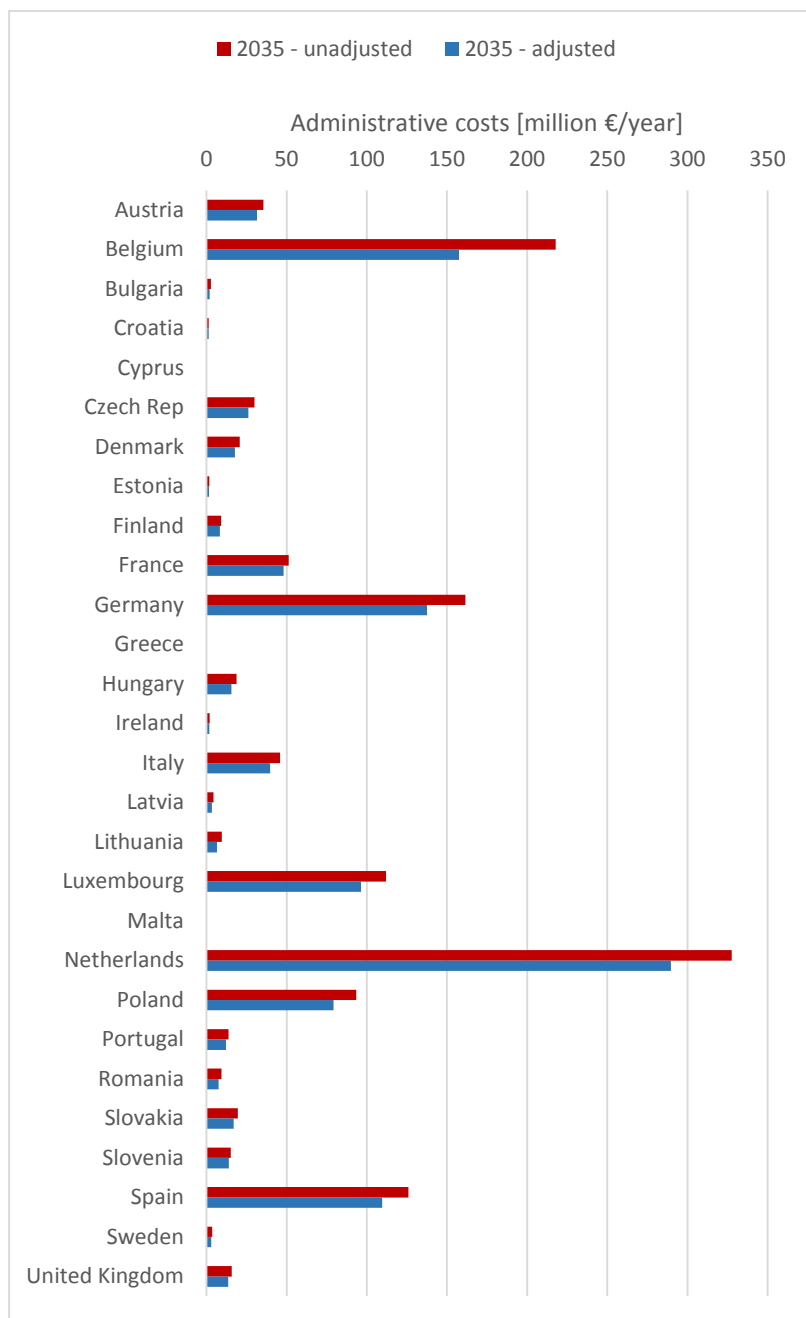
In order to be able to compare the costs, we convert the values to a t-km basis using the following assumptions:

- The average trip length of an international or cabotage trip in the EU is 321km, based on (DTU, 2017) for Germany. This was assumed to be the same across all countries.
- The average load per truck/trip is assumed to be 15 tonnes for international trips and 12 tonnes for cabotage trips, consistent with (DTU, 2017). To simplify the calculations we have used the weighted average, which due to the higher number of international trips is 15 tonnes when rounded up.

The 1.0 elasticity was used to adjust the number of t-km for all posting and host country combinations in response to the change in cost. Leading to reductions in activity in 2015 with the introduction of the first set of host countries introducing minimum wages and in 2020 with the second set of host countries joining. With these new activity figures the administrative costs and compliance costs are calculated again.

As shown in Figure 5-18 and Figure 5-19 the annual costs connected to administrative activities and compliance have reduced compared to the unadjusted values as they are now taking the impact of increased costs on transport activity into account.

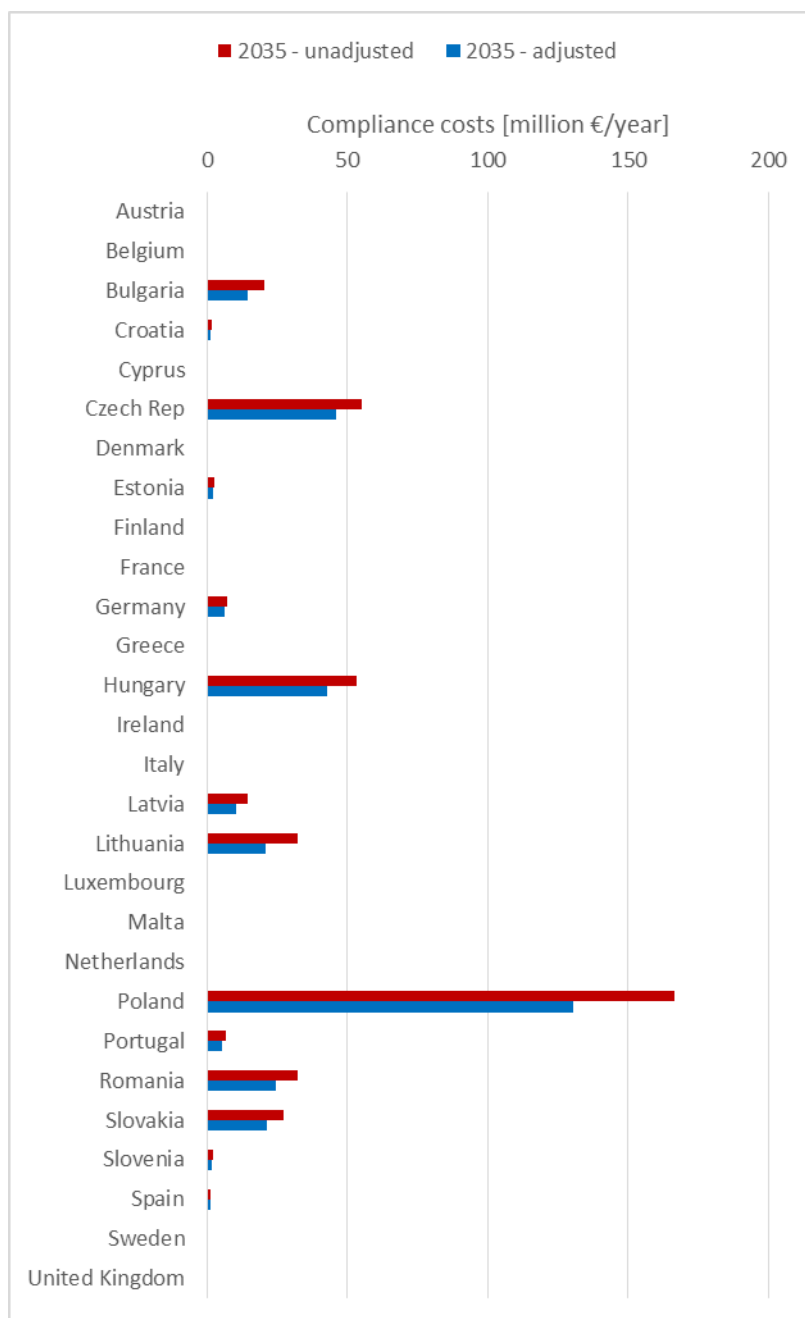
**Figure 5-18: Annual administrative costs (in 2015 values) by posting country summed up across all host countries that apply minimum wages in the baseline (AT, DE, FR from 2015, BE, SE after 2019) – UNADJUSTED versus ADJUSTED in 2035**



Source: Ricardo calculations based on DTU (2017) data and administrative cost data provided by Czech and Austrian industry representatives

Total unadjusted administrative costs in 2035: 1,349 million€/year; Total adjusted administrative costs in 2035: 1,141 million€/year

**Figure 5-19: Annual compliance costs (in 2015 values) by posting country summed up across all host countries that apply minimum wages in the baseline (AT, DE, FR from day one, BE, SE after 2019) - UNADJUSTED versus ADJUSTED in 2035**



Source: Ricardo calculations based on DTU (2017) data and CNR (2016) and TLP (2016)

Total unadjusted compliance costs in 2035: 423 million€/year; Total adjusted compliance costs in 2035: 329 million€/year

### Non-compliance costs

Finally, we should also note that there are certain **costs of non-compliance** (cost from fines and sanctions) that will be incurred by operators that do not meet the requirements set. As indicated in section 5.3.1.2 (Table 5-1), the Member States that currently apply minimum wage laws have set sizeable penalties for non-compliance (typically around €1,000-€10,000 but up to €500,000 in Germany under certain circumstances).

Data on the levels of non-compliance were not available given that these new rules were only recently adopted. A certain level of non-compliance should still be expected given the high administrative costs. Some operators should be expected to circumvent the rules (intentional non-compliance) while the fact that Member States will apply different rules should also lead to confusion and mistakes and, as a result, to a certain level of unintentional non-compliance. The adoption of such national wage rules by four more Member States in 2019 (Belgium, Denmark, Luxembourg, Sweden) should contribute to further confusion and thus to even higher levels of unintentional non-compliance.

Overall, while it is not possible to quantify the costs of non-compliance for operators, they should be expected to remain an additional cost element that will probably increase over time.

## 6. ANALYSIS OF IMPACTS

The following sections outline the impacts of each policy option in key impact areas. In general, colour coding is used to refer to the direction (positive or negative) and size (small or large) of any expected impacts (see Table 6-1).

**Table 6-1: Coding used to present expected impacts**

xx	x	0	✓	✓✓	
Strongly negative	Weakly negative	No or negligible impact	Weakly positive	Strongly positive	Unclear

### 6.1. Social impacts

#### 6.1.1. Impact on compliance with EU social rules

In general, the proposed measures should be expected to have an impact on both unintentional and intentional compliance with the rules.

In terms of **unintentional non-compliance**, short-term impacts may arise if operators and drivers need time to adjust to new rules. Measures involving substantial changes to the scope or substance of the existing legislation would create transitory increases in unintentional non-compliance that would reduce back to baseline levels over time. In the longer term, simplifications, harmonisation and clarifications of the legislation should be expected to reduce unintentional non-compliance because operators/drivers would have a lower chance of misunderstanding the rules.

The levels of **intentional non-compliance** will depend on the impact of the proposed measures on a number of interrelated factors that make up the overall enforcement environment:

- The effectiveness of enforcement, in terms of the (perceived) probability of being caught when making an infringement;
- Level of penalties for committing an infringement;
- The cost of compliance, in terms of the suitability and flexibility of the rules for the sector.

Increasing the probability of being caught is expected to have a deterrent effect and reduce compliance rates<sup>23</sup>.

It should be noted that there are no measures under consideration that would have an impact on the penalty levels or their coherence across the EU.

The analysis of the impact on level of compliance with the social rules is largely qualitative. As indicated in the baseline (Section 5) there are no quantitative data on the projected levels of non-compliance with the various provisions. Thus, the analysis is focused on the expected direction and level of the impact on intentional and unintentional non-compliance on a qualitative basis. Relying on stakeholders input, other evidence and stakeholder feedback we have attempted to rank-order the effectiveness of the measures under consideration.

##### 6.1.1.1. PP1 – Clarification of the legal framework & improve cooperation

All measures of policy package 1 are expected to impact on compliance. They are analysed in turn below.

<sup>23</sup> For example, see the Research Handbook on the Economics of Criminal Law, Harel & Hynton, which discusses the economic theories supporting the view that the probability of detection (and to a much lesser extent the size of the sanction) has a deterrent effect.

Regarding **measure (3)** (allow drivers to spend the regular weekly rest in the vehicle) the analysis suggests contradicting effects on compliance. Currently, a ban on spending the weekly rest in the vehicles applies in Belgium and France. While data on the levels of compliance with the specific rules in the two countries are not available, input from a number of industry representatives (from Bulgaria, Czech Republic, Poland, Romania) and 3 operators established in Hungary, Slovakia, Germany) suggest that compliance can be particularly challenging due to a lack of suitable rest spaces. This was also identified as a key driver of low compliance in (Ricardo et al, 2016). Thus, by allowing weekly rest to be spent in vehicles, an important cause of non-compliance should be removed.

While there is support among some authorities and operators for the measure, there were also still significant reservations raised among most authorities and trade unions about the capacity to ensure effective enforcement. Representatives from all Member States<sup>24</sup> and Norway and Switzerland expressed their view about this measure. 12 authorities<sup>25</sup> from 12 countries<sup>26</sup> expect it to have positive impact on clarity of the rules and therefore on their better enforceability, but 14 others<sup>27</sup> from 12 other countries expect a negative impact<sup>28</sup>. Some contradicting views between the views of representatives of a country should be noted. In particular, Estonian transport police expected negative effect, while the Ministry of Transport - positive. Similarly, the Czech Directorate of Customs responsible for the enforcement expressed a negative view while the Czech Ministry of Transport expressed a positive view.

An important number of authorities (22<sup>29</sup> representing 20 countries) expect smaller or major problems with implementation of the specific measure, while 10<sup>30</sup> others do not expect any implementation problems. It should be noted that in three countries authorities from different institutions do not share the same views<sup>31</sup>. Nearly half of authorities (14 out of 30, from 12 Member States, Norway and Switzerland)<sup>32</sup>, primarily from EU15, and the representative of ECR considered that verifying "free choice" may lead to significant variations in enforcement. A few individual hauliers from EU13 (Hungary, Bulgaria, Poland) considered that presenting a declaration should be sufficient and easy to check. However, trade unions (ETF, from the Netherlands and Belgium) pointed out that drivers would struggle to withstand pressure from their employers to sign a declaration and it may be difficult for authorities to prove this. Thus, the actual effectiveness of enforcement – in terms of the ensuring that staying in the vehicle is a free choice of a driver – could be open to abuse.

Overall, measure (3) provides additional flexibility to drivers and operators, which should have a positive impact on compliance levels in comparison to the current situation. However, enforcement to ensure that there is no abuse of the flexibility provided can be particularly challenging with significant reservations on the clarity and the practical application. Thus, there will be a need for very clear and specific criteria are set to allow authorities to assess "free choice" and what the acceptable circumstances may be.

---

<sup>24</sup> With exception to Poland which did not participate in a survey

<sup>25</sup> BG, CZ, FI, EL, HR, IE, LT, LU, LV, RO, EE, PT

<sup>26</sup> Hereafter in the text, reference to a number of countries is provided only if a number of replies does not coincide with a number of counties provided the reply.

<sup>27</sup> EL, DE, EE, FR, NL, BE, NO, AT, AT, AT, CH, CZ, FI, SE

<sup>28</sup> 4 more (HU, SI, SK, UK) expected no impact.

<sup>29</sup> 3 from AT, CY, CZ, HU, IE, LT, NL, EL, CH, CZ, DE, EE, FI, FR, IT, RO, SE, SK, BE, NO,

<sup>30</sup> 10 others (BG, EE, ES, FI, EL, HR, LU, LV, SI, UK) indicated no problems.

<sup>31</sup> The Estonian transport police foresees major implementation problems, while the Ministry of Transport does not expect problems. Similarly, the Greek Ministry of Transport indicated major problems while the Ministry of Labour expect no problems. The Finish Ministry of Social affairs expects major problems while the Ministry of Transport does not expect any problems

<sup>32</sup> AT, EL, CH, CZ, DE, EE, FI, FR, IT, RO, SE, SK, BE, NO

The proposed measure to clarify that break, resting and driving time arrangements can be adapted to address specific exceptional circumstances (**measure (4)**), should help to reduce unintentional non-compliance. Exceptional circumstances – such as traffic (congestion, accidents) – can prevent drivers from reaching their destination or the home/base for the regular weekly rest. Article 12 of the Regulation already provides some flexibility in assessing the legitimacy of any deviation from the rules, but according to Ricardo et al. (2016) problems were still reported by authorities in Poland and a group of stakeholders<sup>33</sup> in the UK regarding how to determine extraordinary circumstances and the suitability of a stopping place, as well as with the non-uniform application of the rules across countries. Data on the number and share of cases of non-compliance directly linked with exceptional circumstances is not available to measure the precise impact of such a measure. Nonetheless, a positive impact in reducing unintentional non-compliance should be expected. This assessment is also supported by individual hauliers (from Czech Republic, Poland, Slovakia, Hungary, Germany) and industry associations (from Denmark, Romania), who pointed out that increasing flexibility can help ensure that operators and drivers remain in compliance. To the extent that there is a clear definition of the exceptional circumstances that can be easily enforced at the roadside, compliance should increase. Otherwise, it is possible that such exemptions can be used to circumvent the rules, thus leading to increases in intentional non-compliance. Overall, the evidence suggests that the impact should be positive, provided that clear definition of exceptional circumstances is adopted.

In the case of **measure (10)**, setting a maximum period for response to requests can be quite important, particularly when dealing with cases where information from multiple authorities may be needed. Most national authorities were supportive of the proposal: 19 out of the 27 authorities<sup>34</sup> representing 23 Member States and Norway and Switzerland agreed that it could lead to more effective enforcement<sup>35</sup>. However, in the case of the 2-day deadline for responses for "urgent" enquiries some concerns were raised about its implementation. In particular, 10 authorities<sup>36</sup> (representing 8 Member States) considered that the practical implementation could be a major problem and 9 more that it could be a small problem<sup>37</sup>. Three other authorities suggested (France, Belgium and UK) that the 2-day period is rather unrealistic. Conversely, the ECR representative considered that a 2-day period is reasonable but also commented that Member States will need to agree on what constitutes an "urgent" matter aiming to avoid excessive number of requests and overloading of authorities.

In terms of the proposed clarification of the links between Regulation 561/2006 and Directive 2002/15 (**measure (12)**), both options ((12a) and (12b)) aim at improving the clarity of the rules and thus fighting unintentional non-compliance. However, option (12a) – under which derogations under the former in the case of exceptional circumstances may also result in derogation from the weekly working time thresholds set out in the latter should also increase the flexibility to operators when they face exceptional and unforeseen circumstances. This can have a positive impact on compliance. Industry representatives did not provide any input on the specific measure and a large share of national authorities (10 out of 29 who were asked to provide input in relation to options (12a) and (12b)) did not express their views about it<sup>38</sup>. However, among those that did provide specific views there was greater support for option (12a) although the level of input was relatively limited. 9 out of 29 national

---

<sup>33</sup> More detailed information on the stakeholders is not available

<sup>34</sup> CH, 2 from CZ, EE, EL, FI, HR, IE, 2 from LV, RO, SE, SI, DE, HU, LU, NL, PT, NO

<sup>35</sup> 5 authorities expected it to have a negative impact on enforcement. In the case of Finland, the Ministry of Social Affairs indicated that there should be negative impacts while the Ministry of Transport that it will make enforcement more effective.

<sup>36</sup> 2 from EL and LV, FI, FR, IT, LT, RO, SK

<sup>37</sup> CZ, EE, IE, NL, SE, SI, UK, BE, NO

<sup>38</sup> 2 from AT, 2 from CZ, EE, IT, SI, SK, UK, BE

authorities (representing 7 Member States and Norway)<sup>39</sup> consider that option (12a) could result in more effective enforcement, in comparison to 6 authorities (representing 4 Member States and Switzerland)<sup>40</sup> who considered that not applying the same derogations could be more effective (option 12b). In the same vein, 7<sup>41</sup> authorities (5 Member States and Norway) considered that option 12b would make enforcement less effective, while only 4<sup>42</sup> considered the same result for (12a). Only two authorities (Croatia and Romania) considered both options equally effective and two more authorities (Bulgaria and Estonia) equally ineffective in enforcement.

Clarifying the reasoning of their assessment, asked to refer to any specific issues from the proposed measures, 7 national authorities<sup>43</sup> (representing 5 Member States and Norway) stated that there are major problems if the same derogations do not apply (option 12b) and 3 more<sup>44</sup> that this could lead to inconsistent approaches when it comes to addressing similar issues and be a source of confusion, thus possibly leading to possible unintentional non-compliance. According to the Norwegian authorities, applying the derogations can improve enforcement while increasing clarity for the drivers and a similar positive view in terms of the clarity and consistency provided was expressed by authorities in Italy, Sweden and Greece. In the opposite case, there is a higher possibility for infringements of the Working Time Directive because drivers may only relate to the exception they have been given under the Driving Time Regulation. Thus, streamlining the derogations for the pieces of legislation (option 12a) can have a positive effect on compliance, in comparison to option (12b). In comparison, only one authority from Germany considered that there will be major problems from applying the same derogations (option (12a)) and 5 more<sup>45</sup> that it will be a minor problem. The Finish authorities<sup>46</sup> commented that any exemptions in terms of rest time should not lead to increases in the overall working time.

On the other hand, still, according to the input from two authorities<sup>47</sup> a more effective approach to ensuring a consistent approach would be to include the relevant rules from Directive 2002/15 into Regulation 561/2006. Comments from industry representatives were not provided in relation to measure (12), however, it can only be expected that a harmonised approach should increase clarity and increase flexibility in the case of exceptional circumstances.

We should note that the level of impact of any such measure should also be expected to be rather limited since exemption under article 14 are rare. 8 exemptions were granted under exceptional circumstances<sup>48</sup> and 36 as urgent cases<sup>49</sup> during the period 2007-2014 (32 of which were due to bad weather conditions) (Ricardo et al, 2016). Thus, it appears that streamlining the derogations between Regulation 561/2006 and Directive 2002/15 (option 12a) can have a more positive impact in clarifying the application of the rules in comparison to option (12b) while any negative impact in terms of the overall application of working times rules should be rather limited.

**Measure (16)** - exclusion from the scope of the Regulation 561/2006 of occasional drivers performing operations for private purposes - should help to clarify the scope of the Regulation and address uncertainty related to the coverage of non-professional

---

<sup>39</sup> 2 from EL, HR, IE, RO, SE, NO, HU, PT, where 5 of those (HU, NO, 2 from EL, SE ) also considered option 12 b being ineffective.

<sup>40</sup> CH, 2 from FI, EL, HR, RO, out of those 2 authorities (CH and FI) also consider 12a being non-effective

<sup>41</sup> HU, NO, 2 from EL, BG, EE, SE

<sup>42</sup> BG, CH, EE, FI

<sup>43</sup> 2 from EL, DE, HU, PT, SE, NO

<sup>44</sup> EE, FI, LU

<sup>45</sup> CH, EE, FI, PT, BE

<sup>46</sup> Ministry of Social Affairs and Health; Finnish Ministry of Transport and Communications & Finnish Transport Safety Agency.

<sup>47</sup> NO, LV

<sup>48</sup> article 14.1 of Regulation 561/2006

<sup>49</sup> under 14.2 of Regulation 561/2006

drivers. Despite the ECJ ruling of Case C-317/12 of October 2013 that stated that the provisions "essentially" apply to professional drivers, some Member States (in particular the UK and Spain) still apply the rules to all drivers and this is a source of inconsistency (Ricardo et al, 2016). Thus, the proposed measure should make a positive contribution and help avoid cases of unintended non-compliance. However, industry representatives (Bulgaria, Romania, Denmark, Germany, Sweden, Czech Republic and the UK) pointed out that a clear definition of occasional driver for private purposes should still be provided in order to ensure clarity and avoid situations where this is used to avoid compliance with the rules.

In the case of the voluntary EU uniform formula for calculating risk rating (**measure (9V)**), adoption of a single formula should accommodate the use of data from other authorities and improve the risk-based targeting of enforcement. 23 out of 32<sup>50</sup> of the national authorities that responded to the survey (representing 18 Member States and Norway) felt that it could make enforcement more effective. Only 3 authorities from Cyprus, Italy and Switzerland thought it would have a negative impact. As regards the implementation of the measure,, 8<sup>51</sup> authorities (out of which 4<sup>52</sup> support a potential effectiveness of this measure) suggested that it would require significant additional effort to streamline the different existing approaches although 20 other authorities<sup>53</sup> and the ECR representative did not agree with such a view. It should be noted though that a similar attempt by the Commission (together with Member States) recommending a formula to calculate risk ratings was not taken up by all Member States, which led to limited impact on improving enforcement (Ricardo et al, 2016). In conclusion, previous experience shows that a voluntary approach could not be sufficient to ensure that all Member States commit to making the necessary changes, and hence this measure should have limited impact on compliance.

Another voluntary measure under Policy Package 1 concerns the establishment of minimum threshold for controlling compliance with working time provisions (**measure (14V)**). Such a measure could potentially lead to an increase in the number of checks and, as a result, to strengthen enforcement of Working Time rules where the evidence available suggests low levels of compliance across the EU (Ricardo et al, 2016). Data on the number of checks on working time is sparse (see Table 6-2), but in most Member States where direct comparisons are possible (Czech Republic, France, Luxembourg and Poland) they are only a fraction of the checks conducted to enforce Regulation 561/2006 where a 3% applies. Only in Greece is the number of checks in relation to both pieces of legislation the same. However, according to the most recent monitoring report (European Commission, 2016b), Greece is well below the 3% threshold. Thus, adopting a similar (3%) rule and including control of working time rules as part of roadside checks could lead to a significant increase in the level of enforcement activity – and thus on compliance – if Member States voluntarily accept to allocate the necessary resources.

---

<sup>50</sup> 2 from EL, 2 from FI, 2 from EE, 2 from CZ, HR, IE, LT, 2 from LV, NL, RO, SE, SI, SK, HU, LU, PT, BE, NO

<sup>51</sup> DE, EE, FR, IT, LT, LU, UK, BE

<sup>52</sup> EE, LT, LU, BE

<sup>53</sup> 2 from EL, BG, CH, 2 from CZ, EE, ES, 2 from FI, , HR, IE, 2 from LV, PT, RO, SE, SI, SK, NO,

**Table 6-2 – Number of checks for Working Time Directive (2002/1/EC) and Driving Time and rest rules (Reg. 561/2006) during the period 2013-2014**

	Working time Directive (2002/1/EC) (A)	Checks related to enforcement of Regulation 561/2006 (B)			Ratio A/B (where comparable figures available)
		Working days checked	Drivers checked	Undertakings (at premises)	
BG	4,424 checks	4,850,274 (roadside) 4,348,933 (premises)	396,026 (roadside) 155,319 (premises)	11,594	n/a
CZ	719 inspections	445,935 (roadside) 871,793 (premises)	301,741 (roadside) 8,331 (premises)	1,116	64% of inspections
FR	9,902 drivers 4,784 operators	26,521,082 (roadside) 3,822,619 (premises)	1,024,453 (roadside) 92,722 (premises)	11,352	0.8% of drivers checked
EL	4,072 inspections	229,082 (roadside) 118,088 (premises)	24,920 (roadside) 5,835 (premises)	4,072	100%
LU	29,064 of working days checked	144,907 (roadside) 92,974 (premises)	7,332 (roadside) 2,294 (premises)	118	12% of working days checked
PL	- 1,097 checks - 5,368 drivers	6,735,135 (roadside) 3,639,375 (premises)	724,366 (roadside) 31,232 (premises)	5,287	0.7% of drivers checked
ES	1,794 interventions	8,097,845 (roadside) 3,262,843 (premises)	648,207 (roadside) 116,206 (premises)	221	n/a

Source: 28<sup>th</sup> report on the implementation of social legislation (European Commission, 2016b)

However, 9 authorities<sup>54</sup> from 8 Member States indicated that there could be major practical problems with its implementation and 9 more<sup>55</sup> that there will be small problems. Five (Finland, Greece, Hungary, Ireland, Sweden) specifically focused on the significant additional resources required. When asked to assess the expected impact on enforcement costs from the mandatory adoption of the measure, 7 authorities from 6 Member States indicated that should remain the same<sup>56</sup> and 10 that they should increase<sup>57</sup>. Thus, it should be expected that most authorities will chose not to comply with any voluntary threshold – and considering that Member States are already free to increase their enforcement efforts under current rules, it should be expected that this measure will have a negligible, or at most, a minor impact.

**Measure (17a) - allowing Member States to forbid all performance based payment** - is not expected to have a positive impact. As established in Ricardo et al.

<sup>54</sup> DE, FI, EL, 2 from HU, IE, IT, RO, UK

<sup>55</sup> AT, CH, CZ, EE, FI, LT, LU, LV, SE

<sup>56</sup> 2 from BE, CH, 2 from EE, FI, SK

<sup>57</sup> CY, FI, LT, SI, NO, DE, HU, LV, PT, RO

(2016), variable payment represents an important part of the drivers' remuneration, particularly in EU13, and is often a reason behind non-compliance with social rules. The inclusion in Regulation 561/2006 of the clause that only prohibits such schemes if they endanger road safety (Article 10(1)) appears to be problematic to enforce in practice (Ricardo et al, 2016). On this basis, allowing Member States to forbid performance based payment in a more clear/direct way – rather than linking it to the possible risk towards road safety – should help to clarify the legal framework in those Member States that implement the measure. On the other hand it may lead to a diverse legal framework. Among authorities, only 2 suggested that forbidding performance based payments will make enforcement less effective (Switzerland, Norway) but 12 indicated that may be problems from such prohibition<sup>58</sup>. There were also different positions taken by national industry representatives. During the interviews, the Spanish and Czech associations argued in favour of maintaining some form of performance based payment – although not linked with distance travelled – while others (Germany, Austria, Slovenia) were clearly in favour of forbidding performance based payments. This probably suggests that, in the case that this is left open to Member States, operators would probably end up having to comply with a diverse legal framework across the EU28, thus leading to increased levels of unintentional non-compliance. While it is not possible to quantify the level of impact, the proposed measure is probably expected have a minor and probably negative impact.

Finally, establishing a voluntary reporting template for **biennial national reports (measure 15V)** for the Working Time Directive should allow more effective monitoring of the implementation of the Directive. The positive contribution of reporting in the context of enforcement of Regulation 561/2006 was confirmed in (Ricardo et al, 2016). A positive assessment on the impact on enforcement effectiveness was made by 12<sup>59</sup> out of 32 respondents (representing 10 Member State) to this question (12<sup>60</sup> more did not indicate any impact and only 2<sup>61</sup> considered that it would have a negative impact). However, regardless of their views on the effectiveness of the enforcement, 10 authorities indicated possible problems for implementation of this measure due to additional resources needed<sup>62</sup> and 10<sup>63</sup> stated that it should lead to increase costs for enforcement. Experience from the existing common reporting template for Regulation 561/2006 suggests that ensuring consistent collection of data – and thus more effective monitoring is still an issue, even if the introduction of the electronic reporting tool has been successful in encouraging a higher response rate and making the reporting easier (Ricardo et al, 2016).

Given the voluntary nature of the measure, national authorities should adopt this measure only if any benefits in the form of improved coordination provided outweigh any costs. The feedback provided from authorities suggest does not seem to provide a clear support for this. As a result, relatively limited adoption of the template may be expected unless it is actively promoted by EU level organisations like CORTE or ECR. Overall, the level of impact of the proposed voluntary measure should be expected to be very minor.

---

<sup>58</sup> CY, EE, FI, LV, RO, CZ, DE, ES, IE, LT, NL, NO

<sup>59</sup> 2 from BE, 2 from BG, FI, HR, LU, RO, SE, SI, NO, PT

<sup>60</sup> AT, CH, CY, DE, EE, FR, HU, IE, IT, LT, LV, SK

<sup>61</sup> EE, EL

<sup>62</sup> CZ, FI, IT, LT, SE, SK, UK, DE, EL, HU

<sup>63</sup> CY, EE, FI, HU, LT, RO, SI, CH, DE, PT

**Table 6-3: Summary of impacts from PP1**

Measure	Impact
(3) Allow for spending a regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.	Unclear. Positive impact from increased flexibility (reducing unintentional non-compliance) but problems with proving and enforcing free choice (possibly increasing intentional non-compliance).
(4) Clarify that breaks, resting and driving time arrangements may be adapted (without changing time limits) to address specific exceptional circumstances under which transport operation is carried out and/or to enable reaching home/base	Limited positive impact from increased clarity and flexibility leading to reduced unintentional non-compliance.
(9V) Voluntary EU uniform formula for calculating risk rating, which would also include the results of so called "clean" checks (no infringement detected)	Positive but very limited impact due to expected low level of adoption.
(10) Enhance administrative cooperation of national control authorities by introducing a time to respond to requests of one MS within a certain time period: (i) 2 working days in urgent cases (e.g. in case of very serious infringements and (ii) 25 working days in non-urgent cases unless a shorter time limit is mutually agreed	Positive impact from improved information exchange and cooperation.
(12) Clarify links between Regulation 561/2006 and Directive 2002/15 in terms of derogations:	
(a) derogations from the driving and resting times rules granted in exceptional circumstances may also result in derogation from the weekly working time thresholds;	Positive but very limited impact from clarification and consistent approach.
(b) derogations from the driving and resting times rules granted in exceptional circumstances may not result in derogation from the weekly working time thresholds;	Negative but minor impact from not consistent approach.
(14V) Voluntary threshold for controlling compliance under Directive 2006/22	Positive but limited impact due to expected low level of adoption.
(15V) Establish voluntary reporting template for biennial national reports on results of controls of compliance with WTD similar to reporting template for checks on Regulation 561/2006.	Positive but very limited impact due to expected low level of adoption.
(16) Exclude occasional non-professional drivers involved in for private purposes from the scope of the Regulation 561/2006	Positive impact from increased clarity assuming a clear definition of activities to be excluded is provided.
(17a) Allow Member States to forbid (on their territories) all performance based payment	Limited negative impact from diverging legal framework across EU leading to unclear legal framework and increased unintentional non-compliance.
Overall impact of PP1	Overall, very limited impact on levels of compliance is expected on the basis of increased clarity and some improvements of enforcement.

#### **6.1.1.2. PP2 - Strengthening of enforcement and changes to obligations**

All measures of Policy Package 2 are expected to impact on compliance. The first set of measures that were voluntary under Policy Package 1 and are now mandatory are all expected to have a positive impact (as already indicated in the previous section 6.1.1.1). The mandatory approach of the measures should ensure an EU-wide

adoption that could result in a far greater impact on the effectiveness of enforcement and on the levels of compliance. In the case of the **establishment of mandatory minimum threshold for controlling compliance with working time provisions** in line with requirements for checks at the premises under Directive 2006/22 (**measure (14C)**), a positive impact on enforcement effectiveness – and thus on compliance – should be expected. In this case, Member States could be required to meet the thresholds for checks and thus the total number of checks – and thus the probability that a non-compliant operator or drivers will be caught – will also increase. In the medium-long term this should lead to increased levels of compliance. Indeed, 19<sup>64</sup> out of 32 respondents to the authorities' survey (representing 16 Member States and Norway) indicated that a mandatory adoption of the measure could have a positive impact on effectiveness of enforcement. Only 3 (Switzerland, Finland, Greece) suggested that will make enforcement less effective and the remaining indicated that they expect no impact. However, according to some authorities (Sweden, Finland ) in the case of the Working Time Directive the quality-thoroughness of the checks is more important than the quantity. They expressed concerns that a significant increase in the number of checks may have a negative impact on quality of the checks that can increase the probability that non-compliant operators or drivers are not identified during checks. As indicated in the analysis of the voluntary measure (14V) (Section 6.1.1.1), there are significant concerns over the impact on enforcement costs by a large number of authorities. Thus, taking into account the recent reduction in total enforcement capacity, the introduction of a mandatory threshold may lead to sacrificing quality for quantity. As a result, it is possible that the positive impact from an increase in the overall number of checks will be partly lost by a less comprehensive enforcement approach.

Changes to the **calculations of required regular weekly rest period of 45 hours (minimum average resting time over a reference period of rolling 4 weeks) according to measure (1)** should lead to simplifications and increased flexibility that should make compliance easier for operators to achieve and faster for enforcement authorities to check. This view is supported by a high share of national authorities that responded to the survey, but there are also important dissenting views. 10<sup>65</sup> out of 33 national authorities (in 9 Member States) considered that it can improve enforcement of the rules while 7<sup>66</sup> considered that it would make it less effective. When asked to indicate if they expect problems with enforcement - most (15<sup>67</sup> out of 32 representing 11 Member States and Norway) indicated that there would be no problems in enforcing the provisions and 18<sup>68</sup> out of 32 did not expect any problems with fraud/evasion of the rules. 16<sup>69</sup> out of 32 (representing 12 Member States and Norway) did not think there would be increased time needed to conduct the checks. There was still scepticism by a smaller share of authorities (7<sup>70</sup> out of 32 thought that there would be major difficulties in enforcement, 9<sup>71</sup> expect increase in fraud/evasion<sup>72</sup>. It should be noted that contradicting views about the enforcement of these measure were expressed among authorities in the same Member State<sup>73</sup>. Thus,

---

<sup>64</sup> AT, 2 from BE, 2 from BG, DE, EE, FI, HR, HU, IE, IT, LU, LV, PT, RO, SE, SK, NO

<sup>65</sup> 2 from AT, CZ, FI, HR, LT, PT, SE, EE, BE,

<sup>66</sup> AT, DE, NL, CH, CY, FI, IE

<sup>67</sup> 3 from AT, 2 from CZ, EE, FI, HR, HU, LV, RO, SI, UK, BE, NO

<sup>68</sup> AT, EL, CH, CY, 2 from CZ, EE, HR, HU, LT, LV, RO, SE, SI, SK, UK, BE, NO

<sup>69</sup> 3 from AT, CY, 2 from CZ, EE, FI, HR, HU, LT, RO, SE, UK, BE, NO

<sup>70</sup> EE, ES, FR, EL, IE, IT, NL,

<sup>71</sup> BG, DE, EE, ES, FR, IE, IT, LU, NL,

<sup>72</sup> Although only 1 provided an explanation, linking to possibly unclear definitions.

<sup>73</sup> The Estonian enforcement authorities (Transport police) indicated significant problems with enforcement while the Estonian ministry of transport stated that no problems should be expected. The Finnish Ministry of Transport indicated that no problems are expected while the Finnish Ministry of Social Affairs indicated that small problems are expected.

there is a rather mixed picture among authorities as to the extent that enforcement will become more effective, thus leading to higher compliance levels in the long term.

Individual comments during interviews also provided different views as to the extent that the measure would ease enforcement. The representative of Euro-Control-Route and the Swedish authorities considered that increased flexibility would only make it more difficult to enforce the rules. In contrast, the Romanian and Belgian authorities commented that the proposed provisions are much easier to understand and to apply.

Other stakeholders provided dissenting views. There is recognised increased flexibility among industry representatives (from Austria, Czech Republic, Germany, Spain, Poland, Romania and Denmark) and some individual hauliers (from Germany, Czech Republic, Poland and Slovakia), which should help meet the new provisions with limited additional effort. Others (e.g. NLA, UETR) considered that ensuring compliance with the regular rest time rules would still be complicated and would require additional investment in specialised software to monitor rest times. National drivers' representatives (from Belgium, the Netherlands, Slovenia) also indicated that the 4 week reference period would allow drivers to pile up all rest period in one week and this could make controls more difficult.

Overall, there seems to be some hesitation about the proposed measures from a sizeable minority of stakeholders that seems to reflect the fact that any changes to established rules would create complications and may lead to problems for enforcement. However, the proposed simplification should make compliance with the provisions easier to monitor and to enforce in the long term, a point supported by most authorities. While it is not possible to estimate the level of the impact, the input provided suggests that an overall positive contribution should be expected in the medium to long term.

In relation to the complete **prohibition of spending the regular weekly rest of over 45 hrs in the vehicle (measure (2))**, this measure should provide greater clarity for operators, drivers and enforcers, thus reducing unintentional non-compliance. However, authorities and trade unions question the capacity to properly enforce such a measure. While 15 out of 32 authorities that responded to the survey<sup>74</sup> (representing 11 Member States and Switzerland) expect this measure to improve enforcement, 9 Member States and Norway made a negative assessment of the impact on effectiveness of enforcement<sup>75</sup>. At the same time, independently from their views on the effectiveness of the enforcement 15<sup>76</sup> authorities pointed to possible major problems with practical application of the enforcement measure and 11<sup>77</sup> of them commented that proof that the employer has ensured that regular weekly rest has been spent in adequate accommodation can be challenging a view also supported by national industry representatives (from Austria and Germany).

Other issues were also raised from industry associations and drivers, mainly from the EU-13 (Czech Republic, Bulgaria, Hungary and Romania) but also from Denmark and at cross-country level (NLA), concerned the availability of sufficient facilities across Europe, particularly in terms of ensuring safe parking space for trucks in several countries (Ricardo et al, 2016) . EEA and the Bulgarian and Czech industry representatives indicated that the experience from France and Belgium – where staying in the vehicles is prohibited – is that drivers often have to go off-route to find adequate rest areas. Thus, compliance with the specific provisions may come at significant additional cost and provide an incentive for non-compliance. Furthermore, as was pointed out by the Spanish and Austrian associations and a number of individual drivers (HU, SK), drivers (employees or self-employed) can find themselves in a particularly difficult position given that they are responsible for the security of the

---

<sup>74</sup> 3 from AT, CH, 2 from CZ, EE, FI, HR, HU, PT, EL, DE, SE, SK

<sup>75</sup> BG, EE, IE, NL, BE, EL, LV, RO, SI, NO,

<sup>76</sup> BG, CZ, 2 from EE, FR, EL, IE, IT, LT, NL, RO, SE, SI, BE, NO,

<sup>77</sup> CZ, EE, EL, HU, LV, UK, RO, SE, SI, BE, NO

load/goods and they are often not allowed to leave them unattended. Thus, they may often prefer to stay in the vehicle throughout the night, again in breach of the proposed new provisions. In addition, the Romanian association suggested that existing experience is that receipts from hotel are often not accepted by enforcement authorities, especially if issued in other languages.

In addition, the Belgian authorities pointed out that there are possible problems when the specific measure is combined with the proposed changes to the regular weekly rest period (measure (1)). Under the new proposals for regular weekly rest the driver has the possibility to have 3 consecutive reduced weekly rests inside the vehicle. This means that detecting a driver for spending his regular weekly rest inside the vehicle can be a lot more difficult.

In assessing the impact of the measure it should also be noted that there is no standard and generally accepted definition of "adequate accommodation". References were made by the French authorities to existing definitions provided in the of the French labour code<sup>78</sup> and the Portuguese authorities to the International Labour Organisation (ILO) Workers' Housing Recommendation<sup>79</sup> that provide rather specific definitions. In Finland, the collective agreement makes reference to "hotel-standard accommodation". However, most authorities avoided providing a specific definition and made reference to the need to include sleeping, hygiene, eating and washing facilities and, in some cases, to leisure facilities. Among industry representatives, ones from Czech Republic, Germany, Spain and Poland suggested that the vehicle cabin amenities available should be considered as the benchmark to assess other facilities. Reference was also made to the Transpark system<sup>80</sup> and the Truck parking label<sup>81</sup> that have been developed to rate rest facilities on motorways, or to the standard hotel star rating system. An important point for all four industry representatives mentioned above is the need for the presence of secure parking space, given that the protection from theft is a key concern. When asked to indicate what an adequate accommodation should include, drivers also gave preference to some basic standard elements such as the provision of sleeping, hygiene, eating and washing facilities (see Figure 6-1). Thus, while there seems to be a broadly shared understanding of the minimum amenities that need to be included, there is still need for a clear definition that would ensure consistent implementation across the EU. In its absence, national authorities will possibly adopt their own specific criteria that will maintain a certain level of uncertainty and, as a result, should contribute to unintentional non-compliance.

---

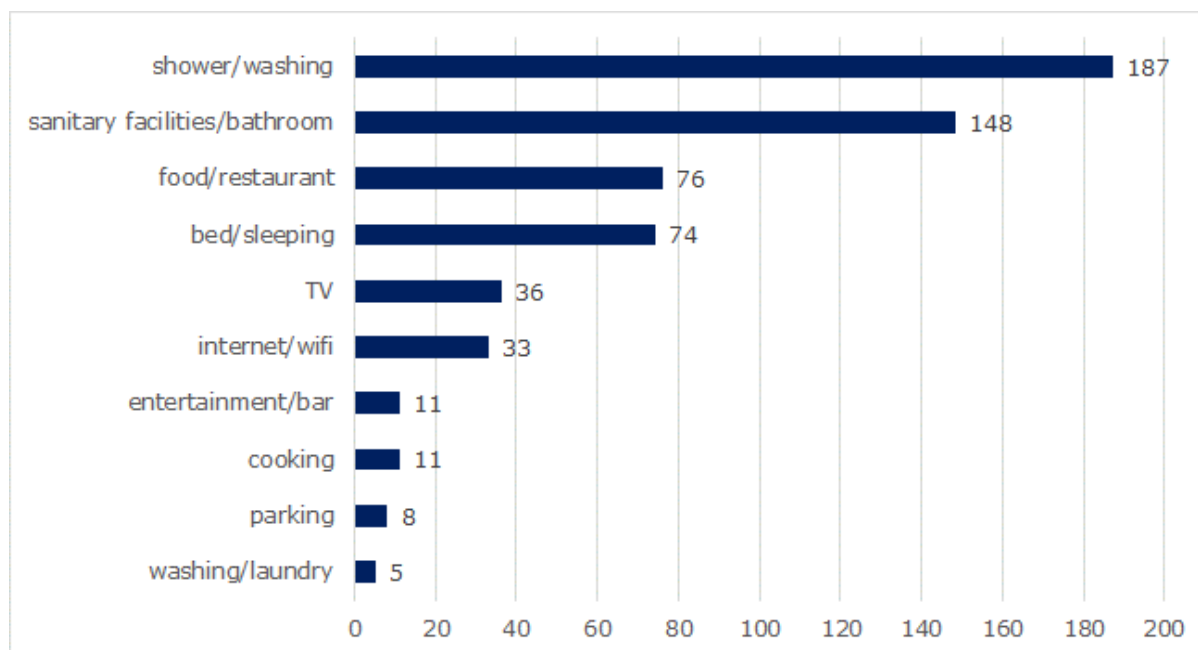
<sup>78</sup> Currently Article R4228-27 (Legi-France, 2008)

<sup>79</sup> R115 (ILO, 1961)

<sup>80</sup> See: <https://www.iru.org/apps/transpark-app>

<sup>81</sup> See: <http://truckparkinglabel.eu/>

**Figure 6-1 – Commonly identified amenities to be included in the an “adequate accommodation” according to drivers (number of time a specific terms was used)**



Source: Drivers' survey; Note: based on 258 responses to this question

Overall, while the prohibition of spending the regular weekly rest of over 45 hrs in the vehicle could increase consistency of the legal framework across the EU (thus reduce unintentional non-compliance), there are significant questions as to the impact on intentional non-compliance. Authorities point to a number of issues concerning enforcement of the measure while operators and drivers highlight challenges and possible additional costs that may lead to unintentional (due to the absence of relevant facilities) or intentional (in order to avoid additional costs) non-compliance. Further analysis of the costs to operators is provided in Section 6.2.1.2. Analysis of impact on costs to authorities is provided in Section 6.2.2.2.

Concerning the proposal that **the break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each (measure (5))**, the increased flexibility should help operators avoid situations of unintended non-compliance where external factors such as congestion can make compliance more difficult (Ricardo et al, 2016). This was indeed the view of most industry representatives (in particular from Austria, Czech Republic, Bulgaria, Spain, Poland, Romania, Denmark and Nordics logistic association, UETR and EEA). Individual hauliers (from Hungary, Poland, Czech Republic and Germany) considered that it would have a positive impact on the flexibility of operations and rest time taken while not posing any issues in terms of compliance.

Relatively positive was also the assessment among national authorities. 10 out of 32<sup>82</sup> national authorities that responded to survey, which considered that enforcement would be more effective, with 15<sup>83</sup> (representing 12 Member State and Norway) more indicating that no impact should be expected and 5<sup>84</sup> expecting that this will make enforcement less effective. At the same time, most authorities (23<sup>85</sup> out of 34 that

<sup>82</sup> BG, CH, CY, FI, EL, HR, IE, LT, PT, RO

<sup>83</sup> 3 from AT, EL, CZ, EE, FI, HU, LU, LV, SI, SK, UK, BE, NO

<sup>84</sup> CZ, EE, IT, NL, SE

<sup>85</sup> 3 from AT, 2 from EL, BG, CY, CZ, EE, ES, 2 from FI, HR, HU, IE, LT, LU, LV, RO, SI, SK, BE, NO

responded which represents 18 Member States and Norway) indicated there would not be any problem with implementing this measure.

Objections were raised during interviews with 7 authorities<sup>86</sup> who argued that the proposed changes would not help ensure adequate rest for drivers but did not comment on the enforceability and ease of compliance. Similar opposition was raised by trade unions at EU (ETF) and national level (the Netherlands, Slovenia, Belgium, Italy), who commented that the proposed measure would not provide sufficient time for rest and that such short breaks would lead drivers to park on the roadside. However, in terms of compliance with the specific measure there is no strong evidence that it would bring any significant change.

Furthermore, the driver's survey provides some support to the idea that the proposed measure would increase the flexibility of drivers to deal with unexpected circumstances, thus contributing to reduced levels of unintentional non-compliance. More specifically, 61% of drivers that responded to survey (199 out of 326 (61%)) considered that the proposed change would slightly or significantly increase their flexibility and this applied for drivers from both EU-15 and EU-13 countries (183 out of 302 (61%) and 15 out of 22 (69%) respectively). Having said that, individual comments from drivers' suggested that 15 minutes are not sufficient for an appropriate break. Overall, from the point of view of compliance levels, the proposed measure should be expected to have a positive impact in reducing unintentional non-compliance.

Allowing controllers to **access the risk-rating system (measure (8))** in real-time is expected to have a positive impact on the effectiveness of enforcement, since it allows for more targeted enforcement focusing on frequent offenders (Ricardo et al, 2016). Among national authorities, the majority expressed positive views as to the contribution of this measure to the effective of enforcement. 23 out of 32<sup>87</sup> authorities, representing 19 Member States and Norway, considered that it can have a positive or very positive effect while 3 authorities from Switzerland, Estonia and Italy indicated that it would make enforcement less effective and German authorities that it would have no impact.<sup>88</sup> Some contradictions were observed while analysing the position of authorities within some Member States<sup>89</sup>. As regards the implementation of the measures, three authorities (from Czech Republic, France, Greece) suggested possible implementation problems during roadside checks such as limited resources/equipment or access to the network in remote locations. Two more (from Italy and Switzerland) stated that they did not consider access to risk-rating system information particularly relevant or useful in the case of roadside checks, since it cannot be used to pre-select vehicles during roadside checks. They added that, since the types of infringements that need to be checked once a vehicle is stopped is well established, handling risk rating information would only add to the existing administrative work of enforcers.

In the absence of a standard and consistent approach in the use of risk-ratings among national authorities (Ricardo et al, 2016), the impact of the proposed measure should be expected to vary. Nonetheless, it should be expected that – to the extent that it makes enforcement more effective – the overall impact on compliance should be positive.

In relation to **abolishment of the requirement to submit attestation forms (measure (11))**, the conclusions of (Ricardo et al, 2016) on the absence of uniform application across the EU – even following the issuing of a guidance note by the

---

<sup>86</sup> CZ, DE, EE, FR, NL, PT, SE

<sup>87</sup> 2 from CZ, HU, LU, NL, PT, BE, NO, 2 from FI, 2 from LV, EL, CY, EE, FR, HR, IE, LT, RO, SI, SK, UK

<sup>88</sup> Two considered that the measure not be relevant (SE, EL) and 3 did not know.

<sup>89</sup> The Estonian enforcement authority (Estonian Police and Border Guard Board) considered that the measure would have a negative impact, contradicting the Estonian ministry of transport which expected a positive impact.

Commission – suggest that such a measure would help eliminate the confusion concerning the circumstances under which an attestation form is needed. Ricardo (2016) had also found that falsification of information in attestation forms was a common issue that was difficult to address.

Thus, a removal of attestation forms should also eliminate the possibility for some drivers to manipulate the information provided to give the pretence of compliance. This conclusion is supported by the majority of the respondents to the authorities' survey, as 18<sup>90</sup> out of 34 authorities, representing 16 Member States and Norway, indicated that it would make the enforcement more or significantly more effective, while only 6<sup>91</sup> considered that it would make enforcement less effective<sup>92</sup>. Still, while 17 authorities did not identify any problems<sup>93</sup>, 5<sup>94</sup> authorities indicated that there may be major problems from such a change. The main concern raised was that attestation forms are still relevant in the case of drivers with old tachographs and those that only drive occasionally. For drivers with older generation tachographs, entry of the relevant information in the tachograph can be very difficult and can lead to unintended non-compliance. As pointed out by the Latvian and Austrian authorities interviewed, if attestation forms are removed but there are no other relevant changes to the rules, occasional drivers would have to provide data for the previous 28 days, which could also lead to mistakes. While it should be expected that the gradual uptake of digital and smart tachographs would provide an answer to such concerns, in the short-medium term CORTE has proposed that a requirement to include information on rest should only apply to daily rests (and not to the total rest over the previous 28 days). It is proposed by CORTE that drivers should not be required to record information when not driving. On this basis, it can be expected that the proposed measure would have a small positive impact on compliance by eliminating any confusion concerning the requirement for submitting attestation forms (unintended non-compliance) as well as improving enforcement and removing the opportunity to manipulate the relevant information provided in the attestation forms (intended non-compliance).

In terms of the proposed **reduction of the reference period used for the calculation of the maximum average weekly working time to 4 weeks (measure (13))**, the impact on compliance will be determined by the impact on the capacity of authorities to monitor and control working time, as well as the possible impact on the operators (costs) from a less flexible regime in terms of arranging the working time of drivers. In that respect, the role of measure 14 (analysed above) introducing a minimum number of checks in relation to working time rules should also be considered.

From the enforcement perspective, reference to a 4 week period can allow authorities to make direct use of tachograph data, thus making control during roadside checks possible. This seems to be the view of the majority of national authorities. 16<sup>95</sup> out of 32 respondents to the authorities' survey, representing 12 Member States and Switzerland, indicated that this could make enforcement more effective and 6<sup>96</sup> more significantly more effective, which would also suggest a positive impact on reducing intentional non-compliance. Only two (France and Hungary) considered that it would make enforcement less effective. In combination with an increase in the number of

---

<sup>90</sup> EL, CH, FI, HR, IE, LU, 2 from LV, NL, SE, SI, SK, NO, CZ, HU, LT, PT, RO

<sup>91</sup> CZ, EE (Police and Border Guard), BE, BG, ES, IT

<sup>92</sup> 4 (CY, DE, EE (Ministry of Economic Affairs and Communications, FI) considered that it would have no impact. Two considered the question not relevant (FI, FR) and 4 (AT, AT, EL, UK) did not know. The Czech enforcement authority (General Directorate of Customs) considered that the measure would have a negative impact, contradicting the Ministry of transport which expected a positive impact.

<sup>93</sup> 2 from EL, CH, CY, EE, FI, HR, HU, IE, LT, NL, RO, SE, UK, NO

<sup>94</sup> DE, EE, IT, LU, BE

<sup>95</sup> 2 from BE, 2 from BG, CH, CY, 2 from EE, FI, HR, IE, LT, LV, NL, RO, SK

<sup>96</sup> AT, EL, IT, PT, SE, NO

checks (Measure 14) which are expected to improve effectiveness, an overall positive impact on compliance could be expected.

However, a number of practical issues were raised even among those that appeared supportive that suggest the impact may be limited. <sup>97</sup> authorities considered that there are major problems with the practical implementation and 7 more that there may be small problems<sup>98</sup>. Two authorities (Finland and Hungary) questioned the capacity to effectively enforce the proposed changes on the grounds that working time provisions agreed in the context of collective agreements are monitored by health and safety authorities and not by police. This is also in line with Ricardo et al. (2016) which found that various approaches are taken to enforcing the Directive. Others (Belgium and Switzerland) considered that operators may face difficulties in recalculating the new reference period and the German Ministry of Transport considered that a long transition period will be needed. The Dutch enforcement authorities that were interviewed as part of the study visit suggested that the main issue is the recording and controlling of availability time, an aspect that is addressed as part of the proposed changes. Similar concerns about the capacity to control compliance with working times rules during roadside checks were also raised by ECR and CORTE representatives. Thus, controlling compliance with working time rules – particularly during roadside checks – may remain particularly problematic, irrespective of the reference period adopted.

From the point of view of hauliers, individual hauliers<sup>99</sup> and industry representatives<sup>100</sup> (expect a negative impact on the flexibility of transport operations. Other associations<sup>101</sup> considered that ensuring compliance with the proposed WTD provisions could be difficult for operators. Thus, industry seems to consider that the proposed reduction in the reference period would be more difficult, which suggests a possible increase of unintentional non-compliance, at least in the short term. From the point of view of drivers, trade unions (ETF and Netherlands) were supportive of the essence of the proposal. However, they also agreed that the proposed provisions are difficult to enforce during roadside checks and cannot only be checked in premises retrospectively assuming proper recording based on the use of smart tachographs.

Overall, while most authorities seem to be rather supportive of the proposed measure, there are still limitations identified to the actual capacity to properly check working time – something that is not addressed by the proposed provisions. The proposed measure does not appear to change current practices in any important way. At the same time, given the reduced flexibility arising from the shorter reference period, a certain level of non-compliance, at least in the long term, should be expected.

**Table 6-4: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Very limited impact on levels of compliance on the basis of increased clarity and some improvements of enforcement.
(1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks	Small positive impact on compliance as a result of improved enforcement and increased flexibility. Initial increase in unintentional non-compliance during transition period.
(2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable	Increased consistency of the legal framework across the EU reducing unintentional non-compliance.

<sup>97</sup> BE, CH, DE, HU, IT

<sup>98</sup> AT, BG, CZ, EE, FI, FR, LU

<sup>99</sup> HU, PL, CZ

<sup>100</sup> AT, DE, ES and UETR and the European Express Association (EEA)

<sup>101</sup> DK, PL, CZ

Measure	Impact
accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'	However, intentional non-compliance may not be reduced since underlying reasons for drivers not to comply would not be addressed while problems with enforcement of the measure is questionable.
(5) Provide that a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each	Positive impact due to increased flexibility that can reduce unintentional non-compliance
(8) Allow controllers to access the risk-rating system in real-time of control	Small increase in compliance from expected positive impact on the effectiveness of enforcement in some Member States.
(9C) Compulsory EU uniform formula for calculating risk rating, which would also include the results of so called "clean" checks (no infringement detected)	Positive contribution through improved effectiveness of enforcement. The mandatory nature of the measure would also ensure a high level of adoption across the EU28.
(11) Abolish attestation forms on top or instead of tachograph records and define how 'other' work is best controlled	Small positive impact on compliance by eliminating confusion concerning the requirement for submitting attestation forms (unintended non-compliance) and removing the opportunity to manipulate the relevant information provided in the attestation forms (intended non-compliance).
(13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks.	Limited/no impact on compliance levels expected since there is no change to the capacity to control compliance with working time rules. Some unintentional non-compliance due to the proposed changes may arise.
(14C) Compulsory threshold for controlling compliance under Directive 2006/22	Positive impacts from the increase in the number of checks may be partly lost by a less comprehensive enforcement approach due to increased costs and reduced quality of the checks, reducing the deterrent effect.
(15C) Establish reporting template for biennial national reports on results of controls of compliance with WTD similar to reporting template for checks on Regulation 561/2006.	Positive but limited impact from improved information exchange among authorities.
Overall impact of PP2	Small overall positive impact expected as a result of the overall improvement of enforcement and clarity.

#### 6.1.1.3. PP3 - Targeted revisions of the social legislation

The additional measures of PP3 are all expected to impact on compliance. The proposed **adaptation of the '12-day rule' in international occasional passenger transport by coach (measure (6))** is intended to address the presence of restrictions on the 12-day rule that often incite non-compliance, especially when drivers are exposed to pressure from customers to reduce the rest times (Ricardo et al, 2016). The proposed measure essentially reduces the rest period following a 12-day derogation to a total of 69 hours *en bloc*, before a new 12-day period may start (while still ensuring compliance with the Working Time Directive restrictions of maximum average of 48 hours per week). Among national authorities that responded to the survey, most (15<sup>102</sup> out of 35;) considered that it would improve enforcement,

<sup>102</sup> 2 from CZ, ES, HR, IE, LT, PT, RO, SE, SK, BE, NO, BE, BG, LV

although 6<sup>103</sup> thought that it would have a negative effect<sup>104</sup>. Supporting this measure, the Romanian, Swedish and Dutch authorities pointed out that checking that the additional compensation period has been taken under the current regime is often difficult to verify and that the proposed change would make enforcement easier. On the other hand, 6 authorities suggested that there may be major problems<sup>105</sup> with the practical implementation although specific comments focused more on the possible risk for safety from additional flexibility (HU, IT) while the Slovenian authority<sup>106</sup> indicated that completely new software will be needed. Representatives of transport operators also considered that abolishing the compensation period would make compliance easier.

In contrast, as expected, the reaction of drivers and their representatives was that the measure would have a negative impact on the overall level of rest, which could also lead to breaches (mainly unintentional) of vehicle driving rules. Nonetheless, strictly from the point of view of compliance with social legislation, the proposed change should have a positive impact on compliance. In comparison to the current situation, it would make it easier for operators to comply and for national authorities to monitor compliance.

In relation to the proposed **new derogations for domestic occasional passenger transport of passengers by coach (measure (7))**, the proposed changes are intended to ensure that similar rules apply to both domestic and international passenger transport. In principle, the adoption of the measure would increase flexibility and reduce reasons for non-compliance, especially when drivers are exposed to pressure from customers. It is particularly relevant for larger Member States where lengthy domestic trips can be more common. Qualitative input provided from stakeholders representing passenger transport operators as part of the open public consultation suggests that there is significant demand for one-week to 12-days long domestic tours in Germany, Sweden, Finland and UK but also in smaller countries, such as Ireland, although still a small share of domestic operations.

Among stakeholders, representatives of passenger transport operators in a few Member States were supportive of both derogations (Poland, Spain and Bulgaria) on the basis that they can increase flexibility of operations and reduce costs. In the case of authorities, the level of support for the proposed measures is lower compared to the previous measure. 10<sup>107</sup> expect no impact and only 7<sup>108</sup> out of 32 authorities that responded to the survey felt that the 12-day derogation would improve enforcement effectiveness, while 9<sup>109</sup> suggested that it would have a negative impact<sup>110</sup>. The main concerns indicated in the comments provided are related to possible impacts on the level of fatigue of drivers and no specific enforcement related issues were identified. For the 8-day derogation (measure (7b)), only 3<sup>111</sup> authorities expect a small improvement of enforcement while 14<sup>112</sup> expect a negative impact<sup>113</sup>. The main reason for the negative assessment was that the introduction of a different periods for domestic transport can lead to confusion to operators and authorities.

Negative views were expressed by drivers and trade union representatives (Belgium, Netherlands and ETF), who suggested that the introduction of additional derogations

---

<sup>103</sup> HU, NL, 2 from AT, CH, EE,

<sup>104</sup> 6 (AT, EE, 2 from FI, LU, SI) expect no impact, 6 consider the question not relevant (BE, CY, DE, FI, FR, UK) and 2 (EL, IT) did not know

<sup>105</sup> DE, FR, HU, IT, NL, SI

<sup>106</sup> Ministry of infrastructure

<sup>107</sup> AT, BG, CY, EE, FI, LT, LU, SI, BE, NO

<sup>108</sup> EE, HR, IE, PT, SE, SK, LV

<sup>109</sup> CZ, NL, 2 from AT, CH, ES, FI, HU, RO

<sup>110</sup> 3 consider the question not relevant (DE, FR, UK) and 3 (CZ, EL, IT) did not know

<sup>111</sup> BG, PT, SK

<sup>112</sup> CZ, NL, 2 from AT, CH, EE, ES, IE, LT, LV, RO, SE, BE, NO

<sup>113</sup> 8 (AT, CY, EE, FI, FI, HU, LU, SI) expect no impact, 4 consider the question not relevant (DE, FR, HR, UK) and 3 (CZ, EL, IT) do not know

for domestic transport can be detrimental to drivers working conditions. They also raised a concern that such derogations may be used by some operators to organise trips with multiple passenger groups over the same 12- or 8-day period, in breach of rules that allow the derogation to be used only in the context of single trip. The Belgian trade union suggested that this would be difficult for enforcement authorities to check. However, similar input was not provided by any other stakeholder.

Overall, the impact of the proposed measure is expected to be limited to a relatively small number of passenger transport operations, providing greater flexibility and thus reduced reasons for non-compliance. Among the two proposed derogations, authorities seem to have preference for a 12 day period on the basis that it can ensure consistency with the rules that apply to international transport. There is no other evidence to suggest a major negative or positive impact on levels of compliance.

**Forbidding all performance based payment (measure (17b))** should help to remove any uncertainty for operators, drivers and enforcement authorities. They often find difficult to determine whether or not variable payment schemes are in compliance with the legislation or not (Ricardo et al, 2016). In that respect, it should be expected that both unintentional and intentional levels of non-compliance would be reduced. This conclusion is supported by an important number of national authorities, a large share of which (14<sup>114</sup> out of 31 that responded to the survey) consider that the proposed measure should lead to a more effective or significantly more effective enforcement of the rules while 13<sup>115</sup> expect no impact. Only 2 (Czech Republic and Norway) considered that it would have a negative impact. However, concerns over possible practical problems were raised by 12 authorities<sup>116</sup> indicating that it will be difficult to identify such schemes and, even more so, to prove that they are actually in use. Still, 19<sup>117</sup> others considered that there should not be any problem suggesting diverging opinions among authorities within some Member States<sup>118</sup>.

Trade unions (ETF and Netherlands) also confirmed that per-diem or daily subsistence allowance payments are used to camouflage what are in practice performance based payments. This may be difficult to capture during roadside checks – although it should be possible as part of more thorough checks of premises. From the point of view of operators and their representatives, there are diverging views as to whether some form of performance based payment should be accepted on the basis that some part of the compensation should be linked with performance<sup>119</sup>. However, no significant practical compliance issues were identified<sup>120</sup>.

Overall, the proposed measure should increase clarity and enforceability concerning the use of performance payment schemes, thus reducing unintentional non-compliance. Cases of intentional non-compliance should still be expected – on the basis that such schemes are still common and it is not always possible to prove that

---

<sup>114</sup> BG, EE, FI, FI, RO, SE, 2 from EL, EE, FR, HR, IT, PT, BE

<sup>115</sup> 2 from AT, CH, CY, DE, HU, IE, LT, LU, LV, NL, SI, UK

<sup>116</sup> CY, EE, FI, LV, RO, CZ, DE, ES, IE, LT, NL, NO

<sup>117</sup> 2 from AT, 2 from EL, BG, CH, EE, FI, FR, HR, HU, IT, LU, PT, SE, SI, SK, UK, BE

<sup>118</sup> The Estonian enforcement authorities (Transport police) stated there could be small problems while the Estonian Transport ministry that there will not be any problems. The Finnish Ministry of Social Affairs expected not problems while the Ministry of Transport expect small problems.

<sup>119</sup> Associations in CZ, ES were in favour of maintaining some form of performance based payment, while associations in BG, DE, PL, AT felt that forbidding performance based payment was appropriate.

<sup>120</sup> UETR referred to possible problems for firms where the driver is the owner and the only employee (essentially self-employed) in which cases the payment of the driver is essentially linked to the amount of goods transported rather a fixed salary. This type of performance-based payment is core part of the model of self-employed and it will be very difficult for such firms to ensure compliance with a ban to any form of performance-based pay. However, this seems to be a misinterpretation of the proposed measure which concerns employment contracts and not the contracts between operators and their clients.

such payment schemes are in use – but overall non-compliance should decrease. Providing clear definitions of schemes that are considered in breach with the provisions could help avoid cases of unintentional non-compliance and improve effectiveness of enforcement.

**Table 6-5: Summary of impacts from PP3**

Measure	Impact
Overall impact of PP2	Small overall positive impact expected as a result of the overall improvement of enforcement and clarity.
(6) Adapt '12-day rule' in international occasional passenger transport by coach	Simplified rules by removing the compensation provisions that are difficult to control would make rules simpler and enforcement easier having a positive impact on compliance.
(7) Allow for flexibility for domestic occasional transport of passengers by coach:	Very limited positive impact by increasing flexibility and reducing costs for a small share of passenger transport operations in a few countries (reducing pressure for intentional non-compliance).  12 day rule probably preferable to 8 day on the basis that it ensures consistency with the 12 day rule on international transport, avoiding confusion and mistakes by operators.
<ul style="list-style-type: none"> <li>(7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>(7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.</li> </ul>	
(17b) Forbidding all performance based payment (based on distances travelled / amount of goods carried)	Reduce non-compliance on the basis of increased clarity concerning the use of performance payment schemes (reduce unintentional non-compliance) and simplified and more effective enforcement (reducing intentional non-compliance).
Overall impact of PP3	Positive impact driven mainly by the positive impact of measure 6 and 17b and PP2 measures.

#### **6.1.1.4. PP4 - Revisions to PWD – horizontal policy option**

The three measures considered under policy package 4 are expected to have an impact on different aspects of compliance with posting rules. They are very much interlinked and should be considered against a current baseline where national minimum wage laws in 4 – and soon to be 8 - Member States apply from the first day setting different administrative requirements. In addition, it is assumed that there is full compliance with the current provisions.

**Setting of time thresholds (5, 7 or 9 total accumulated days per month) below which wage law requirements under the PWD do not apply** (measure (18)) should lead to a reduction to the scope of the posting rules in comparison to the baseline in the 8 Member States that currently apply wage laws (effective from the first day). Conversely, it should increase (from zero) the scope of affected trips in all other Member States that do not currently effectively apply such rules. It should be noted that the reduction of the scope refers only to the application of the wage laws of the host Member State. Requirements related to documentation will still apply to all operators. From a compliance perspective it is expected that the key indicator of compliance – and the focus of authorities – will be the extent that operators properly apply the wage rules of the host Member States once the 5, 7 or 9 days threshold has been reached.

Table 6-6 shows the expected impact on the scope of the new rules for a number of host countries for which data are available, taking into account the impact of compliance and administrative costs to the total activity (see discussion in Sections 5.3.3.2 and 6.1.2.4). As can be seen, for the Member States with existing wage rules

in place, the expected reduction in the scope should be in the range of 60%-87% depending on the threshold set and the Member State considered. At the same time, there should be an increase in the number of trips that will fall within the scope of the posting rules for the Member States that do not currently impose such measures thus suggested a more broader and relatively more balanced application of the rules across the EU.

**Table 6-6 – Expected impact on the scope of posting rules depending on the threshold 5, 7 or 9 days (thousand trips in 2035) – Adjusted**

	Baseline (number of trips within full scope of current posting rules)	Trips within the full scope (% change in comparison to baseline )		
Host country		5 day threshold	7 day threshold	9 day threshold
<b>MS with minimum wage laws</b>				
AT	2,556	1,025 (-60%)	752 (-71%)	539 (-79%)
BE	6,670	2,467 (-63%)	1,666 (-75%)	1,190 (-82%)
DE	14,519	5,557 (-62%)	4,199 (-71%)	3,046 (-79%)
FR	8,910	2,586 (-71%)	1,670 (-81%)	1,195 (-87%)
SE	1,013	297 (-71%)	192 (-81%)	137 (-86%)
<b>MS without minimum wage laws</b>				
0	16	11	8	0
0	1,082	763	535	0
0	188	137	93	0
0	137	101	70	0
0	397	294	201	0

Source: DTU data and own elaboration

Along with the expected change in the scope of the rules, a minimum threshold applying across the EU28 should help simplify the legal framework when compared to the current situation where operators have to comply with different requirements in Member States with minimum wage laws (thus reduce unintended non-compliance). In addition, removal of the pre-notification requirement could have a positive impact, since this is an area that some hauliers (Czech Republic and Hungary) stated that they often find it difficult to meet, particularly at short notice. It would also have a significant impact on costs for operators (see section 6.2.1 on costs) and reduce the incentives for non-compliance.

On the other hand, as pointed out by a number of industry representatives<sup>121</sup>, the adoption of a threshold will not eliminate the issue that different wages will need to apply for each host Member State. As argued, ensuring that the correct salary is paid can be particularly difficult when a driver spends time in multiple Member States during the course of a trip or during a month. They consider that mistakes are very difficult to avoid, suggesting that certain level of unintended non-compliance would continue in the long term. However, it should also be pointed out that the recent proposal from the Commission (European Commission, 2016d) should be expected to clarify the rules around remuneration requiring Member States to provide detailed information and, thus, make it easier for operators to comply.

From the point of view of effectiveness of enforcement, the input provided was rather limited. 7<sup>122</sup> of the 19 national authorities that responded to the specific question in

<sup>121</sup> AT, BG, CZ, PL, RO, UETR

<sup>122</sup> BE, 2 from BG, EE, HR, IT, SK

the authorities' survey, considered that the application of PWD on the basis of a certain number of days per month would improve effectiveness, while 7<sup>123</sup> more considered that it would have a negative impact<sup>124</sup>. From a practical side 12 national authorities<sup>125</sup> suggested there may be major or minor problems with the implementation. The authorities in Germany and Latvia and Finland indicated that there may be problems of effectively controlling the actual period spent, including the use and control of tachograph information (see below). In general, most of the authorities' views are mainly a reflection of their position as to whether posting of workers provisions should, in principle, apply to workers in the transport sector. Thus, the French, German and Belgian authorities argued that the rules should apply from the first day while the Czech, Hungarian and Latvian authorities that posting should not apply at all.

The effectiveness of enforcement of the posting rules is mostly linked with the two other measures under PP4, the **introduction of a sector-specific administrative requirements and a two-step enforcement process (measure (19))** and the **obligation of drivers to record in the tachograph the country code of the country where they are, each time they stop a vehicle (measure (20))**.

In relation to the **tachograph** provisions, the evidence of its potential impact is mixed. National authorities were only partly supportive of the positive contribution of the specific measure. 9<sup>126</sup> out of the 20 that responded to the survey suggested that it would improve enforcement, while 3<sup>127</sup> considered that it would have a negative impact (see Figure 6-2<sup>128</sup>). Specific comments focused on the fact that the proposed measure does not allow to properly record the time of entry into a specific Member State. According to the Belgian authorities, it would not be practically feasible to introduce the country code every time they stop. Furthermore, a key concern raised by operators in HU and PL is that it is not possible for them to ensure that drivers comply with the proposed requirement or that they do not make mistakes. Drivers' representatives (Italy, Netherlands and ETF) also pointed out that drivers may be pressured by their employers or feel obliged to underreport the time spent in another Member State. According to the Dutch trade union, such an approach would most probably lead to an inconsistent approach in applying the rules.

Overall, while the proposed measure can have a positive impact on the implementation and enforcement of posting rules (and thus reducing non-compliance), ensuring that drivers correctly record the country could be challenging. In turn, this can have a negative impact on the effectiveness of enforcement. It should also be noted that the gradual introduction of smart tachographs should make the implementation of the measure much easier by allowing an automatic recording of the position of the vehicle without any human intervention.

In that respect, trade unions (ETF and Netherlands) suggested that earlier introduction of smart tachographs could be a much more effective measure than the one currently proposed. However, this can only take place with a change to the current timetable set in Regulation 165/2016, which is outside the scope of this intervention.

Finally, concerning **the proposal for a two-step enforcement approach**, national authorities appear rather sceptical of the overall approach proposed. Among the 20 respondents to the survey, 7<sup>129</sup> considered that it would have a positive effect but there were also those considered that there would be a negative impact<sup>130</sup> (see Figure

---

<sup>123</sup> CZ, DE, DE, FI, FR, HU, BE, LV

<sup>124</sup> 1 (LU) indicated no impact and 4 (HU, NL, SE, UK) did not know

<sup>125</sup> AT, BE, BG, FI, EL, SK, CZ, DE, EE, HU, LV, NL

<sup>126</sup> 2 from BE, BG, EE, FI, HR, IT, NL, SK

<sup>127</sup> CZ, DE, LV

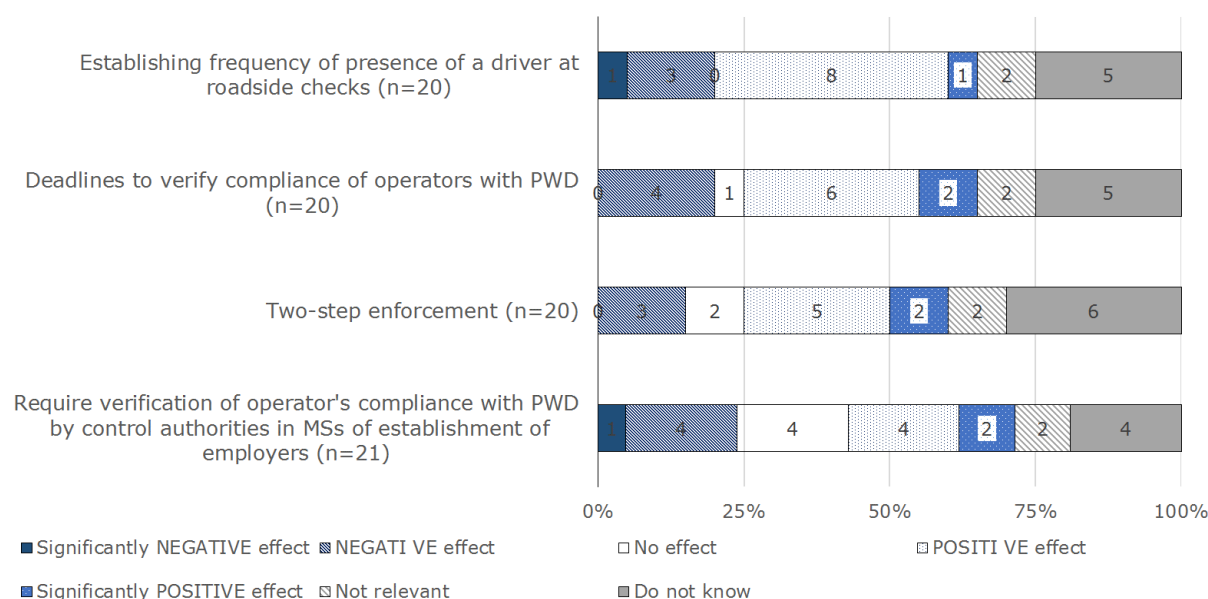
<sup>128</sup> 2 (FR, LU) considered the question not relevant and 5(AT, BG, HU, SE, UK) did not know

<sup>129</sup> 2 from BE, BG, HR, IT, SK, FI

<sup>130</sup> 2 from DE, LV

6-2)<sup>131</sup>. There is also support for setting a specific deadline to verify compliance with the PWD provisions, with 8 authorities being in favour<sup>132</sup> and 3 against<sup>133 134</sup>, and even less support (6<sup>135</sup> positive versus 4<sup>136</sup> negative views<sup>137</sup>) concerning the requirement that verification of compliance should be done by the authorities at the country of establishment. Belgian authorities<sup>138</sup> pointed out that a two-step enforcement could enable comparison of details and could make checks more effective, but also said that this can be a rather resource intensive procedure for authorities to follow. The analysis of the regulatory costs confirms that there are significant additional cost involved (see section 6.2.1) Furthermore, according to the German authorities<sup>139</sup>, enforcement needs to be possible during road side checks or else it would be difficult to enforce while the Italian authorities pointed out that the increased level of cooperation needed would face significant practical problems.

**Figure 6-2 – Expected impact of proposed measures to the effectiveness of enforcement of the posting provisions**



Source: National authorities' survey

The two-step approach should in theory provide a comprehensive enforcement framework – and there is some support in this direction. However, a number of national authorities appear relatively sceptical or negative, focusing on practical/implementation aspects or their view that it would be much more effective to check compliance with the provisions during road side checks. To the extent that relevant experience is transferable, the improved monitoring and enforcement expected as a result of the adoption of the Enforcement Directive 2014/67/EU (European Commission, 2012) could also help ensure the effectiveness of enforcement

<sup>131</sup> 2 (EE, LU) expect no impact, 2 (FR, NL) considered the question not relevant and 6 (AT, BG, CZ, HU, SE, UK) did not know

<sup>132</sup> 2 from BE, BG, EE, HR, IT, SK, FI

<sup>133</sup> CZ, DE, LV

<sup>134</sup> 1 (NL) indicated no impact, 2 (FR, LU) considered in the question not relevant and 5 (AT, BG, HU, SE, UK) did not know

<sup>135</sup> 2 from BE, BG, HR, IT, FI

<sup>136</sup> 2 from CZ, DE, LV

<sup>137</sup> 4 (BG, EE, NL, SK) expect no impact, 2 (FR, LU) considered the question not relevant and 4 (AT, HU, SE, UK) did not know

<sup>138</sup> Federal Ministry of Mobility; Federal Public Service Employment, Labour and Social Dialogue; Labour Inspectorate

<sup>139</sup> Federal Ministry of Labour and Social Affairs; Federal Ministry of Transport

in the transport sector. However there is no assessment of the effectiveness of the adopted measures so far.

Overall, the available input does not provide a clear picture as to the impact on the level of compliance with the posting rules. Against the current framework – characterised by a few Member States with diverging rules and high compliance and administrative costs for all operators involved in international transport in the specific Member States – the proposed measure would significantly reduce the scope of the legislation while providing a greater level of clarity, consistency and predictability at the EU level. This should have a positive impact on compliance.

However, the proposed changes would not eliminate the need for operators to comply with the different minimum wage and annual leave rules across the EU28 Member States. More importantly, against an assumed high level of compliance with the current minimum wage rules on the basis of strict and effective enforcement (see also baseline), there are significant doubts expressed concerning the capacity of authorities to check and enforce the proposed measures. Relying on the use of tachograph data to establish that posting provisions should apply is considered problematic by both authorities, industry and drivers' representatives – even if for different reasons. There are also questions raised by many authorities as to how effective the coordination required as part of the two step enforcement approach can be and to what extent it would maintain the high level of compliance assumed under the current demanding legal framework.

Nonetheless, given the significant reduction to the scope of the rules, the overall level of non-compliance in comparison to the baseline should be reduced.

**Table 6-7: Summary of impacts from PP4**

Measure	Impact
(18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD.	<p>Reduce scope of legal framework concerning posting but ensure a more even application across EU proportionate to the level of posting activity.</p> <p>Simplification of legal framework would have some positive impact on (unintended) non-compliance.</p> <p>Reducing administrative and compliance costs for operators should reduce incentive for non-compliance.</p>
(19) Introduction of a sector-specific administrative requirements and a two-step enforcement process, where the first step is the roadside check carried out by the controllers on the territory of the 'host' Member State and the second step is the check at the premises of a company (driver's employer) by the enforcement authorities of the country of establishment of that company.	Impact (positive/negative) unclear since impact on effectiveness of enforcement from proposed approach not clear.
(20) Oblige the driver to record in the tachograph the country code of the country where he is, each time he stops a vehicle.	Possibly problematic by a number of stakeholders potentially leading to unintentional non-compliance (due to mistakes) – at least during the initial period – or intentional non-compliance (seeking to avoid application of the posting rules).
Overall impact of PP4 on compliance	Positive impact as a result of measure 18.

#### **6.1.2. Impacts on periods away from home/base**

Measures that are expected to have a significant impact on periods away from home include those that affect the costs for operators of having drivers in another Member

States for prolonged period or those that increase or decrease the weekly rest period. More specifically, these are:

- Requirements on spending regular weekly rest in the vehicle, and particularly the measure of forbidding spending the regular weekly rest in the vehicle, obliging operators to pay for accommodation if the driver does not rest at the home place.
- Changes to the provision on regular weekly rest (in combination with the prohibition of spending regular weekly rest in the vehicle) that may reduce the rest time, making lengthier trips away from home less costly.
- Changes to the definition of the posting of workers in transport where, depending on the time-threshold set before posting rules apply, operators may face different labour costs and have the incentive to reduce the duration of certain operators or reorganise operations so that drivers do not exceed the set threshold.
- Changes to the reference period used for the calculation of the maximum average weekly working time to 4 weeks (from 4 or 6 months) and the introduction of 12 or 8 day derogations for passenger transport that may affect the flexibility of operators in using drivers for longer periods.

#### **6.1.2.1. PP1 – Clarification of the legal framework & improve cooperation**

Measures covered under PP1 that are expected to have an impact on periods away from home/base are:

- (3) Allow for spending the regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.
- (4) Clarify that break, resting and driving time arrangements can be adapted (without changing the time limits) to address specific exceptional circumstances under which transport operations are carried out and/or to enable reaching home/base.

**Measure (3)** allows the regular weekly rest to be spent in the vehicle if it is the free choice of the driver or if it is justified by the circumstances. This measure would potentially have an impact in Member States that currently do not allow the driver to spend the weekly rest in the vehicle (e.g. France and Belgium). For drivers operating in such countries this measure could potentially lead to an increase in periods away from home/base, due to reduced costs for spending the weekly rest in vehicles compared to in more expensive accommodation.

Data available from DTU (DTU, 2017) shows the number of drivers affected in these two Member States that explicitly forbid weekly rest to be spent in the vehicle (see Table 6-8). As the report outlines there is significant uncertainty around these numbers, and DTU states that these figures are likely to significantly underestimate the actual number of drivers affected. Due to this uncertainty a comparison with a figure on total number of international drivers from another source would not be sensible.

**Table 6-8: Driver year equivalents per criteria**

Driver origin	Host country	
	Belgium	France
Above 5 days		
EU15	1,986	4,524
EU13	1,242	2,554
Above 10 days		

EU15	819	1,798
EU13	846	1,040

Source: (DTU, 2017)

For drivers operating in countries that currently allow the driver to spend the weekly rest in the vehicle, any impacts on the periods spend away from home will depend on whether it is the driver's free choice to spend the weekly rest in the vehicle. The responses to the driver's survey have shown that the opinions differ as to whether it is preferred by drivers to spend the weekly rest in the vehicle or in a separate accommodation. Several drivers mentioned that they expect the employers to try and keep the costs spent on accommodation as low as possible, which would mean that the accommodation available to the driver will have low standards<sup>140</sup> if no minimum standard for accommodation (e.g. star ratings) is introduced<sup>141</sup>. The lack of cleanliness and privacy<sup>142</sup> was highlighted as a reason for preferring spending the night in the truck over separate accommodation. Drivers also expect that not enough suitable accommodation will be available, especially not one providing sufficient and save parking opportunities<sup>143</sup>. Also, the fact that accommodation needs to be arranged on short notice adds to the difficulty for guaranteeing suitable lodgings<sup>144</sup>. On the other hand the benefits of accommodation away from the truck are highlighted such as access to toilet/washing and eating facilities as well as the safety of drivers<sup>145</sup>. Due to the uncertainties around the preferences of the drivers, it is difficult to assess if the introduction of this measure will lead to an increase or decrease in periods away from home for drivers operating in countries that do not currently have restrictions in place.

One aspect that was highlighted by a range of stakeholders during the interview, is whether the drivers' choice on where to spend the regular weekly rest will actually be free or influenced by pressure by the employer – as discussed in Section 6.1.1 on compliance. Further pressure on drivers is expected to arise from the fear that the additional costs for the employer by providing accommodation will translate into reductions in wages<sup>146</sup> or even companies going out of business<sup>147</sup>.

**Measure (4)** provides more flexibility on break, resting and driving time arrangements for drivers under exceptional circumstances, which would allow them to reach the home/base. No specific stakeholder input could however be collected to support this assumption. While it is not possible to quantify how periods away from home would be affected, anecdotal evidence suggests that drivers sometimes have to stop driving only a short distance away from home/base and have to spend the weekly rest there (e.g. (SKAL, 2013); (BDO, 2015); (Gron, 2009)). This suggests that measure (4) would lead to more drivers being able to spend their weekly rest at home and thus a reduction of periods away from home/base. Since this measure only applies in exceptional circumstances; however, only a small impact is expected.

---

<sup>140</sup> BE driver

<sup>141</sup> FR, UK drivers

<sup>142</sup> DE, NL drivers

<sup>143</sup> DE, NL, UK drivers

<sup>144</sup> UK driver

<sup>145</sup> FR, UK drivers

<sup>146</sup> ES, UK drivers

<sup>147</sup> RO driver

**Table 6-9: Summary of impacts from PP1**

Measure	Impact
(3) Allow for spending the regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.	Increase in periods away from home for drivers operating in Member States that in the baseline forbid spending weekly rest in the vehicle, due to reduced costs for spending weekly rest.  Unclear impact for drivers operating in Member States that in the baseline forbid spending weekly rest in the vehicle due to uncertainties around the preferred choice of the driver.
(4) Clarify that break, resting and driving time arrangements in exceptional circumstances.	Small decrease in periods spent away from home/base due to increased flexibility for drivers that enables them to reach home/base.
Overall impact of PP1	Neutral to potentially a small negative impact on periods away from home by allowing spending regular rest in vehicles in some Member States

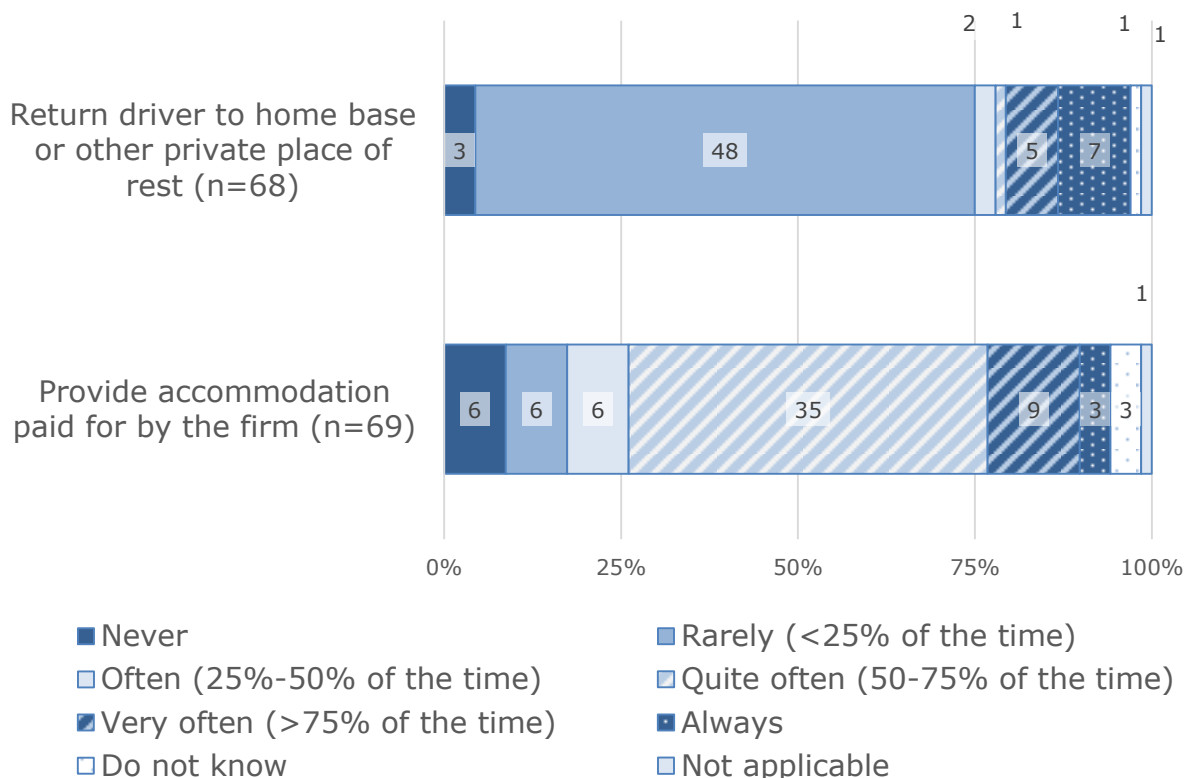
#### **6.1.2.2. PP2 - Strengthening of enforcement and changes to obligations**

Measures under PP2 that might have an impact on the periods spent away from home are the following:

- (2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'.

**Measure (2)** forbids that the weekly rest of 45 hours is spent in the vehicle and requires the employer to provide or pay for adequate accommodation. The additional cost of providing accommodation may incentivise employers to arrange for drivers to return to home more often. However, responses from the hauliers' data request (see Figure 6-3) show that their preferred option would be to provide accommodation paid for by the firm, rather than returning driver to base – suggesting that this measure would not have a significant effect on periods away from home. When the Hungarian responses are removed, the remaining responses show a more mixed opinion, with 5 out of 12 indicating they would always or very often return to home more often, while 6 out of 13 indicated they would very often or quite often provide accommodation.

**Figure 6-3: Transport operators data request Q8: In the case that spending the regular weekly rest periods of more than 45 h in the vehicle is forbidden, which resting places do you expect to give preference to?**



Source: Transport operators ' data request

Drivers were also asked in the targeted survey about how they expect to be affected by **measure (2)**. With regards to their ability to spend their weekly rest at home the largest share of drivers (154 out of 325) does not expect a change, which appears to be in agreement with the responses from hauliers.

To estimate the impacts on periods away from home from the measure, only respondents to the drivers' survey were asked about the change in ability to spend weekly rest periods compared to the current situation. We have therefore used the numbers provided in the drivers' survey to calculate whether the provisions will result in an overall increase or decrease in ability to spend weekly rest periods at home. We calculated a weighted average using a weighting of -2/+2 for the options significantly decreased/ significantly increased and a weighting of -1/+1 for the options slightly decreased/ slightly increased. Table 6-10 shows the changes in ability presented for all respondents and the different values for EU-13 and EU-15 respondents. On average respondents expect an increase in their ability to spend weekly rest at home (19%). Although the sample size is rather small for EU-13 responses, the available inputs suggest that they expect a relatively larger impact in terms of being able to spend weekly rest at home (although the estimated impact of 43% is potentially rather high). No further data could be obtained from the drivers' survey to substantiate the direct impacts of measure (2) on periods away from home.

**Table 6-10: Change in ability to spend weekly rest periods at home due to measure (2)**

Respondents	Number of responses	Weighted average
All	325	+19%
EU13	23	+43%
EU15	300	+16%

*Source: Drivers' survey and transport operators data request (responses to question: return the driver to home base)*

The above shares, as estimated by EU-13 and EU-15 drivers themselves, can be taken as a rough approximation of change in the number of drivers that would benefit from a reduction of periods away from home due to the measure.

Further input to quantify the impact on periods spent away from home are limited.

**Table 6-11: Summary of impacts from PP2**

Measure	Impact
Measure (2)	EU13 drivers: decrease of periods spent away from home by 43%. EU15: decrease of periods spent away from home by 16%.
Overall impact of PP2	Significant positive impact on periods spent away from home.

#### **6.1.2.3. PP3 - Targeted revisions of the social legislation**

The main measures of PP3 that are expected to have an impact on periods away from home are the following:

- (7) Allow for flexibility for domestic occasional transport of passengers by coach:
  - (7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.
  - (7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.

**Measure (7a)** foresees extension of the 12 day derogation in place for international occasional coach tour journeys to occasional domestic coach tour journeys, while **measure (7b)** introduces an 8 day derogation for occasional domestic coach tour journeys. No data was available that allows to quantify the direct impact of these measures on the periods away from home. An analysis of the free text responses received from the drivers' survey provides an overview of the changes expected by the drivers. With regards to measure (7a) the response is overwhelmingly negative. Out of the 148 responses received to the question, 125 see problems and issues with this measure (with the exception of one response from the Czech Republic, all negative comments were received from EU15 drivers). 23 respondents made particular mention of the impact this measure would have on the periods spent away from home. Drivers expect that the introduction of such a derogation will lead to drivers being away from home more, as 12 day stretches of work will become more common due to pressure from the employer. Eight drivers specifically highlight the negative implications that extended periods away from home would have on rest and social/family life due. A few respondents also questioned why there is a need for a 12 day derogation given that only few countries are so large that 12 days are needed for

domestic coach transport<sup>148</sup>. It was felt that the provisions should not be changed to only meet the need of very few EU Member States. With regards to measure (7b) the comments were still negative; the majority of respondents (120 out of 142) still feels that 8 days are too long and will have a negative impact on periods spent away from home. While it is not possible to quantify the change in periods away from home due to the introduction of these measures, the results from the drivers' survey strongly indicate the risks associated with such derogations.

While stakeholders, potentially affected by such a measure, expect significant negative impacts, to estimate the magnitude of the impact, we have to consider the share of the industry to be affected by such changes. Data availability on this topic is limited but the 2014 report from the Commission on the application of the 12-day rule suggests that in most Member States the derogation is not intensively used (European Commission, 2014)<sup>149</sup>.

Thus, while the impact on the level of individual operators may be significant, the overall impact on the industry should be expected to be very small.

**Table 6-12: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Significant positive impact on periods spent away from home.
Measure (7)	Small increase in periods spent away from home across the industry. Impact is expected to be stronger for measure (7a) than for measure (7b).
Overall impact of PP3	Positive impact for most drivers due to measures of PP2. Negative impact on periods spent away from home for coach drivers affected by measure (7).

#### **6.1.2.4. PP4 - Revisions to PWD – horizontal policy option**

PP4 covers the revision of the PWD which is of significant relevance for the periods spent away from home. The following measures are expected to have an impact:

- (18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD.
- (19) introduction of a sector-specific administrative requirements and a two-step enforcement process, where the first step is the roadside check carried out by the controllers on the territory of the 'host' Member State and the second step is the check at the premises of a company (driver's employer) by the enforcement authorities of the country of establishment of that company.

**Measure (18)** introduces time thresholds (of 5,7 or 9 days per month) beyond which the PWD fully applies, i.e. also for minimum wage and annual paid holidays. This measure will have a significant impact on the compliance costs for operators, who will have a cost incentive to reduce the duration of certain operations or reorganise operations so that drivers do not exceed the set threshold. At the same time, the introduction of a sector-specific administrative requirements and a two-step enforcement process (19) will decrease administrative costs for operators – in comparison to the baseline - leading to an increase of activity in other countries and as a consequence on the periods away from home.

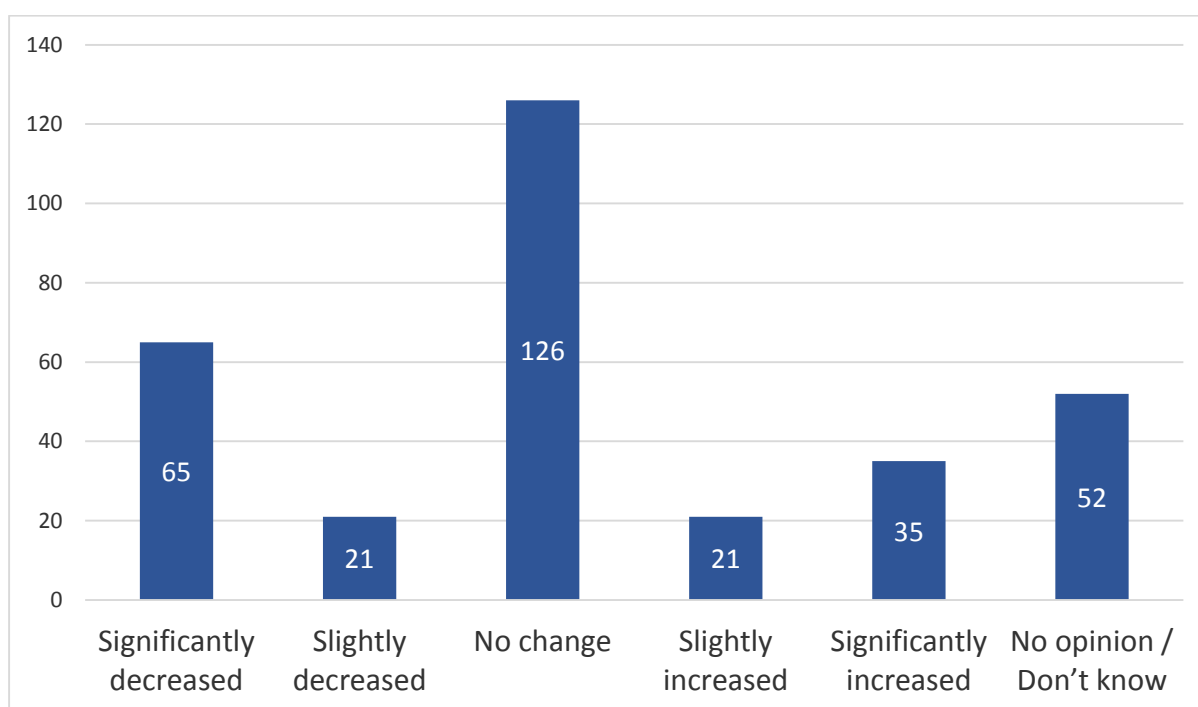
<sup>148</sup> 27 coordinated responses from NL drivers

<sup>149</sup> Only five Member States (EE, LT, LV, LU, SE), out of the 15 Member States that provided quantifiable data, indicated a medium frequency of use (3 in a scale from 0 to 5) while in all other cases the reported figures indicate a less intensive use of the provision.

With regards to measure (18), responses to the transport operators data request indicated that operators do not expect to make any major changes in order to maintain the same level of turnover – the weighted average of the responses for this option is -3%, which suggests a small decrease. In particular, the vast majority expect that the average time spent away from the home base for drivers will stay about the same (50 out of 68 responses). A similar response was seen from both Hungarian and non-Hungarian respondents.

When drivers were asked how they expect that the introduction of these time thresholds will affect their ability to spend weekly rest periods at home, their answers appeared to show good agreement with the expectations of operators: the majority of respondents expected no change (126 out of 320), followed by respondents that expect a significant decrease (65 out of 320).

**Figure 6-4 - Drivers' survey Q13: How do you expect the introduction of such time thresholds will affect the following aspects? – Ability to spend weekly rest periods at home**



In line with the calculations carried out Section 6.1.2.2, we again weigh the positive responses against the negative responses and calculate the average for EU-13 and EU-15 drivers. As Table 6-13 shows, the responses go in different directions for EU-13 and EU-15 drivers. While EU-13 drivers expect a 43% increase in their ability to spend weekly rest periods at home, EU-15 drivers expect a 24% decrease. Although no comments were received to substantiate these estimates, and the sample size for EU-13 respondents was very small, it could be argued that operators in EU-13 countries have a higher incentive to make sure driver schedules are set up in a way to avoid exceeding the thresholds due to the larger differences in wages. For EU15 the wage differential for drivers are not expected to impact the decisions on periods away from home (again, no comments were received to explain the estimates), but it could be argued that the measure would replace the current patchwork of minimum wage laws and reduce administrative requirements, leading to longer periods away from home for affected drivers.

This share is again taken as an approximation of change in the share of drivers being able to spend weekly rest periods at home and consequently experiencing a reduction of periods away from home.

**Table 6-13: Change in ability to spend weekly rest periods at home due to measure (18)**

Coverage	Number of responses	Weighted average
All	320	-19%
EU13	23	+43%
EU15	295	-24%

Based on the data available on the number of trips by posting and host country for trips with different periods away from home (DTU, 2017) and projections made for changes in number of trips, we were able to calculate the impact of measures (18) and (19) on the number of trips in the category of trips above 10 days. The projections take into account changes in number of trips due to overall activity changes in the sector (based on the 2016 EU Reference Scenario (European Commission, 2016a)) as well as impacts of changes in administrative costs (due to measure (19)) and compliance costs (due to measure (18)) (see also Section 6.2.1). The calculations assume that the distribution of trips between different period lengths will stay the same over time. Table 6-14 shows the changes in annual number of trips above 10 days by posting country and for each time threshold in 2035 compared to the baseline. The baseline takes into account impacts on activity due to the introduction of minimum wage laws under the current provisions. The numbers show that the introduction of time thresholds under PP4 leads to an increase in number of trips above 10 days compared to the baseline. The EU wide increase in number of trips is a constant +7% for all three thresholds. Both EU13 and EU15 posting countries show an increase, albeit the EU13 share being slightly higher than the EU15 share (7% versus 6% for the 5 day threshold). These figures suggest that the number of drivers that spend long periods away from home would increase under PP4, and that differences in this impact are not significant depending on the time threshold chosen.

**Table 6-14: Change in number of trips above 10 days under PP4 compared to the baseline for 2035**

Posting country	Change in annual number of trips above 10 days under PP4 compared to the baseline in 2035		
	5 day threshold	7 day threshold	9 day threshold
AT	6%	6%	6%
BE	8%	8%	8%
BG	9%	10%	11%
CY	N/A	N/A	N/A
CZ	6%	7%	8%
DE	4%	4%	4%
DK	7%	7%	7%
EE	6%	6%	7%
EL	N/A	N/A	N/A
ES	10%	10%	10%
FI	5%	5%	5%
FR	5%	5%	5%
HR	4%	5%	5%
HU	8%	9%	10%
IE	5%	5%	5%

Posting country	Change in annual number of trips above 10 days under PP4 compared to the baseline in 2035		
	5 day threshold	7 day threshold	9 day threshold
IT	7%	7%	7%
LT	12%	14%	15%
LU	7%	7%	7%
LV	11%	12%	13%
MT	N/A	N/A	N/A
NL	6%	6%	6%
PL	7%	8%	8%
PT	1%	1%	1%
RO	10%	12%	12%
SE	4%	4%	4%
SI	4%	4%	4%
SK	7%	8%	8%
UK	5%	5%	5%
<b>Total</b>	<b>7%</b>	<b>7%</b>	<b>7%</b>
<b>EU15</b>	<b>6%</b>	<b>6%</b>	<b>6%</b>
<b>EU13</b>	<b>7%</b>	<b>8%</b>	<b>9%</b>

To summarise, the impact of PP4 on periods away from home would be influenced by the following:

- Changes in administrative costs (resulting from the introduction of measure (19)), which may result in changes in international activity. Analysis of operators' administrative costs (see Section 6.2.1.4) shows that the annual administrative costs for international and cabotage trips decrease significantly across the EU and (-45%), which in consequence results in increases in activity as the administrative costs will not be a significant barrier anymore. This impact is higher for EU15 countries with reductions of 47% than for EU13 countries that show a reduction by 39%.
- Changes in compliance costs (resulting from the introduction of measure (18)), which will have an impact on international transport activity. The analysis of compliance costs in the baseline (Section 5.3.5.2) and the impact of PP4 on transport operator costs (Section 6.2.1.4) has shown that compliance costs are a more important factor for EU13 operators (97% of all compliance costs EU wide can be allocated to EU13 Member States). Any impacts connected to changes in compliance costs consequently will be of higher relevance for EU13 operators. In the analysis of the PP4 impact we have analysed the impact of changes in administrative costs and compliance costs on transport activity together and we can therefore not separate out the impact of measure 18 alone on the total number of trips of more than 10 days. The combined analysis however shows, that generally the compliance costs decrease under PP4 (across all 10 modelled host countries), which has to do with the distribution of transport activity across different host countries and the fact that a large share of transport activity in Europe is carried out in host countries that have minimum wage laws in place under the baseline. This decrease in compliance costs would again lead to an increase in international transport activity and thus periods away from home.

- The introduction of thresholds might incentivise transport operators to shorten longer periods away from home to avoid compliance costs (again this is of higher relevance for EU13 operators). However, the data from the transport operators survey have shown that they generally do not expect to make any major changes in the average time spent away from home base for drivers in order to maintain the same level of turnover in case such thresholds were to be introduced.

Overall, periods away from home for drivers engaged in international transport operations should be expected to increase.

**Table 6-15: Summary of impacts from PP4**

Measure	Impact
Measure (18) + Measure (19)	<p>Increase in number of trips of more than 10 days expected for EU13 drivers due to decreases in compliance and administrative costs, partly counterbalanced by the introduction of thresholds.</p> <p>EU15 drivers: increase in periods away from home due to reductions in administrative costs which result in increased international activity. Thresholds do not have a significantly different effect.</p>
Overall impact of PP4	Overall, increase in periods away from home expected with only small difference depending on thresholds set.

### 6.1.3. Impacts on fatigue and stress

Measures can potentially affect fatigue and stress in several ways – the main mechanisms that are analysed here are:

- **Direct impacts:** measures that affect fatigue and stress levels directly, for example through:
  - Measures that could result in changes to drivers' schedules: the impact on fatigue was assessed quantitatively through the use of the HSE tool, as described in Annex B.
  - Measures that affect the clarity and consistency of legislation.
- **Indirect impacts:** are analysed as knock-on effects arising from other impacts that are assessed elsewhere. These include:
  - Measures that impact on compliance (from Section 6.1.1) – improvements in compliance with the social rules should result in reductions of fatigue and stress, due to lower incidence of excessive working hours.
  - Measures that impact on periods away from home (from Section 6.1.1) – reductions in periods spent away from home should result in reductions of fatigue and stress, due to better quality of rest and better access to social support networks (such as friends and family).

#### 6.1.3.1. PP1 – Clarification of the legal framework & improve cooperation

The policy measures in PP1 that are expected to have the most relevant impact on fatigue and stress are as follows:

- (3) Allow for spending the regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.
- (4) Clarify that break, resting and driving time arrangements can be adapted (without changing the time limits) to address specific exceptional

circumstances under which transport operations are carried out and/or to enable reaching home/base.

- Measures that contribute to improved compliance (see above – measures (4), (10), (12a), (16)).
- Measures that reduce periods away from home (see above – measure (4)).

**Policy measure (3)** is likely to result in some small benefits in terms of stress reduction by more clearly defining the conditions under which drivers can spend weekly rest in their vehicles. Drivers will no longer have to contend with varying national legislation<sup>150</sup> and the risk of (potentially very high) fines for spending weekly rest on board their vehicles, which in turn should reduce their work-related stress – especially in cases where no adequate accommodation is available. On the other hand, the measure could result in drivers spending more rest periods in their vehicles where it is not their free choice in those countries that currently forbid drivers spending weekly rest in the vehicle under any circumstances (concerns over enforceability are discussed in Section 6.1.1 on compliance and not repeated here), in which case an increase in fatigue/stress could be expected.

**Measure (4)** allows for (limited and justified) flexibility in arranging for taking breaks and/or rest periods in order to cope with unforeseen difficult traffic situations, weather conditions or other circumstances. This additional flexibility should reduce stress caused to drivers by unexpected delays that are outside of their control, as well as ensuring a more consistent application of the provisions. Previous analysis in (Ricardo et al, 2016) showed that such provisions are applied in a non-uniform way, leading to a lack of certainty over how such flexibilities can be used.

Furthermore, in certain cases this measure would allow drivers reach their home/base for taking their regular weekly rest at home where they might otherwise have needed to stop in the vehicle or other accommodation (see also analysis of impacts on periods away from home). This would facilitate reductions in fatigue and stress because the quality of sleep on the road is more likely to be worse than sleep at home or at a home-like base (ORION Consulting, 2008). While it is not possible to quantify how many drivers would be affected by this measure, there are anecdotal reports of drivers having to stop driving only at a short distance away from a home/base and spend 45 hours of their regular weekly rest there (e.g. (SKAL, 2013); (BDO, 2015); (Gron, 2009)) – suggesting the measure should indeed have a positive effect.

To the limited extent that the measures under policy package 1 **help to improve compliance** with the social legislation - on the basis of increased clarity and some improvements of enforcement (see Section 6.1.1.1) fatigue may also reduce. This is because non-respect of the provisions will lead to excessively long working hours and increased fatigue - violation of the social legislation is one of the key factors that significantly increases the risk of drivers falling asleep at the wheel (Monaco et al, 2005).

The measures of PP1 are not expected to **help to reduce periods away from home**.

**Table 6-16: Summary of impacts from PP1**

Measure	Impact
(3) Allow for spending a regular weekly rest in the vehicle under certain conditions	Positive impact due to reduction of stress for drivers (more consistent legal framework and provisions for free choice); Potential negative impacts if free choice cannot be confirmed.

<sup>150</sup> Currently, there are varying national rules – for instance, France and Belgium prohibit drivers from spending regular weekly rest in vehicles, while other Member States (such as Bulgaria, Czech Republic, Latvia, Lithuania, Sweden and Luxembourg) do not (Ricardo et al, 2016).

Measure	Impact
(4) Clarify arrangements for breaks, resting and driving time under exceptional circumstances	Positive impact due to reduction of stress for drivers (clearer rules and higher possibilities to reach home base).
All measures that improve compliance with the rules	Very limited impact on the basis on limited improvement on compliance reducing the cases of excessively long working hours.
All measures that reduce periods away from home	Limited impact.
Overall impact of PP1	Positive impact due to reduction of stress (clearer rules, more possibility to reach home base and higher minimum standards of accommodation).

#### 6.1.3.2. PP2 - Strengthening of enforcement and changes to obligations

Measures included in PP2 that are expected to have significant impacts on fatigue and stress include:

- (1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks. The weekly rest period of less than 45 hours should not be less than 24 hours and the reduction should be compensated by an equivalent period taken *en bloc* and attached to another weekly rest period.
- (2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest.
- (5) For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged.
- (13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks.

The effects of these measures on fatigue has been assessed quantitatively - full details of the modelling approach are given in Annex B. As before, to the extent that measures of PP2 also **improve compliance with the legislation** and/or **reduce periods away from home**, fatigue and stress should also reduce – these aspects are assessed qualitatively.

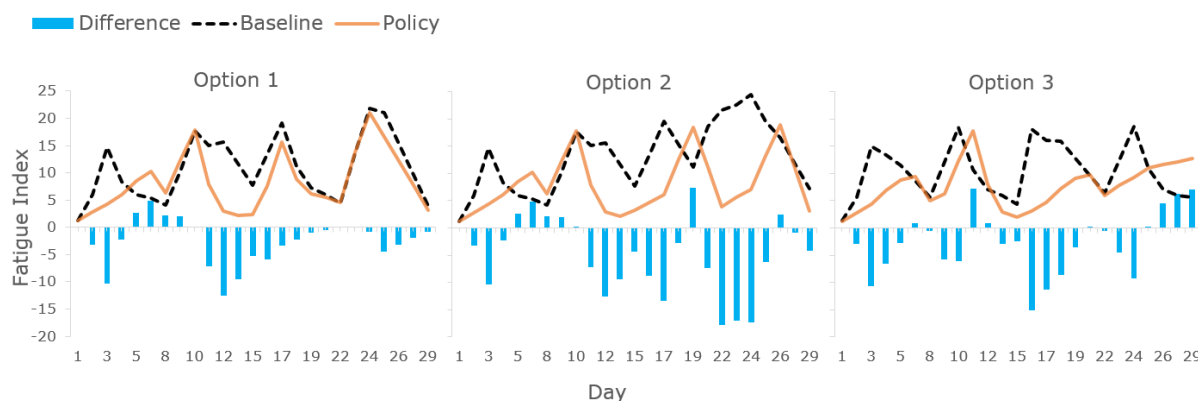
**Policy measures (1) and (13)** are expected to be applied in parallel so that to ensure that any increased flexibility and longer work hours provided by measure 1 are counterbalanced by a more restrictive regime in the calculation of the maximum average weekly working time. As a result, the analysis has considered the combined impact on the fatigue index of the two measures.

To combine the measures, the 4-week baseline was used as opposed to the 4 and 6-month baselines. Due to the high degree of complexity in weekly rest distribution, it was not possible to create options for weekly rest over the longer timeframes. Instead, the baseline weekly rest options (see Figure 6-5) were contrasted with proposed weekly rest options under measure (1). Driving schedules were then created that used the proposed weekly rest distribution, as well as the proposed changes to the calculation of working time from measure (13).

As can be seen (see Figure 6-5), for all three options, the fatigue index is lower for the combined policy schedules than the baseline schedules. This is the result of positive contributions (reductions in fatigue levels) from both measures. Under policy measure 1, schedules have a higher average weekly rest length than the baseline options,

which result in a lower average fatigue index over the 4-week reference period. Under policy measure 13, schedules have reduced working hours on average over the 4 week period, which results in a lower average fatigue index. At their highest points, the schedules under the policy measures reach a maximum of 18.6-24.4, which is below the “good practice” benchmark level of 35 (Highways England, 2016).

**Figure 6-5 - Evolution of fatigue index under baseline and combined policy measures 1 and 13**



*Notes: Options refer to different configurations of taking weekly rest within the current rules. Option 1 (21h to be compensated within 3 weeks, from week 1 to week 3); option 2 (21h added to daily rest of 9h); option 3 (21h to be compensated within 3 weeks, from week 2 to week 5, where week 5 is outside of the assessment period). See Annex D for full details*

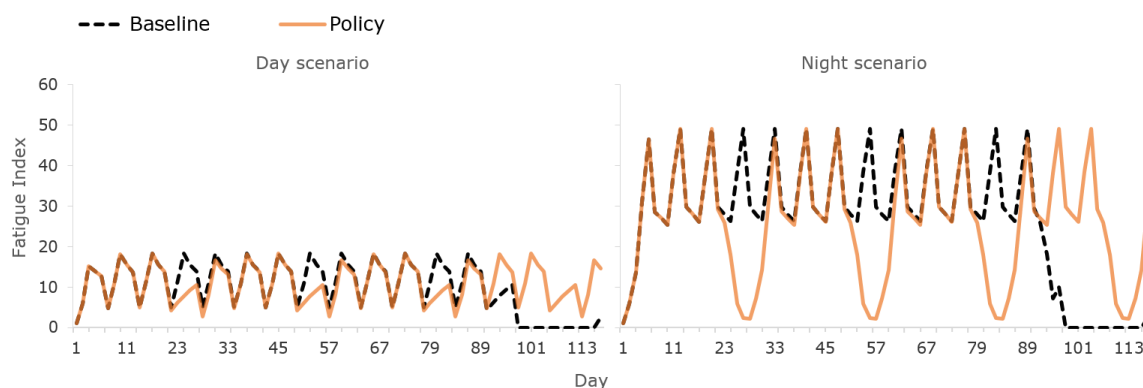
*Source: author calculations, HSE tool (HSE, 2006)*

The difference between the baseline fatigue indexes and the combined effect of the two policies varies in magnitude at specific points as a result of the different schedules, and it can be seen that fatigue levels are elevated compared to the baseline at some points for both options 2 and 3. However, it is the **average fatigue** that is the more important result, rather than differences at single points in time. The average fatigue index is improved (reduced) under all baseline options 1, 2, and 3, seeing a decrease of 2.5 (-23%), 5.0 (-38%), and -2.7 (-26%) respectively. Conversely, option 3 results in a slight increase compared to the baseline (6%). Over all three options, the schedules under the policy measures resulted in a decrease in the average fatigue index by 3.4, or 30%, suggesting that the two measures are likely to have a net positive impact on driver fatigue.

Measure (13) was also examined independently to assess longer term impacts due to excessive working hours over a 4 and 6 month driving schedule. As the current policy takes a working time average over 4 or 6 months, a maximum number of consecutive 60-hour working weeks was used for the baseline (13 out of 15.6 weeks for 4 months, and 20 out of 25.2 weeks for 6 months), compared to a 4-week 48 hour average working week under the policy.

As can be seen in Figure 6-6, the fatigue index is lower for both the day and night scenarios for most of the period, under the 4 month reference schedule. The difference between baseline fatigue indexes and the policy fatigue indexes arise from reduced working hours every 4<sup>th</sup> week. This results in a lower fatigue in those weeks, but also has a small reduction in the subsequent week. However, given that under the baseline there is no work after week 13, the fatigue index is higher at the end of the period. In terms average of the 4-month reference period, the day scenario baseline has an average fatigue index of 12.0, compared to 10.9 for the policy, giving a reduction of 1.1 (-9%). For the night scenario, an even bigger difference is seen, with a baseline average fatigue index of 31.7, compared to 25.5 for the policy, giving a reduction of 6.2 (-19%).

**Figure 6-6: Evolution of fatigue index for changes to the calculation of working time, 4-month reference period**

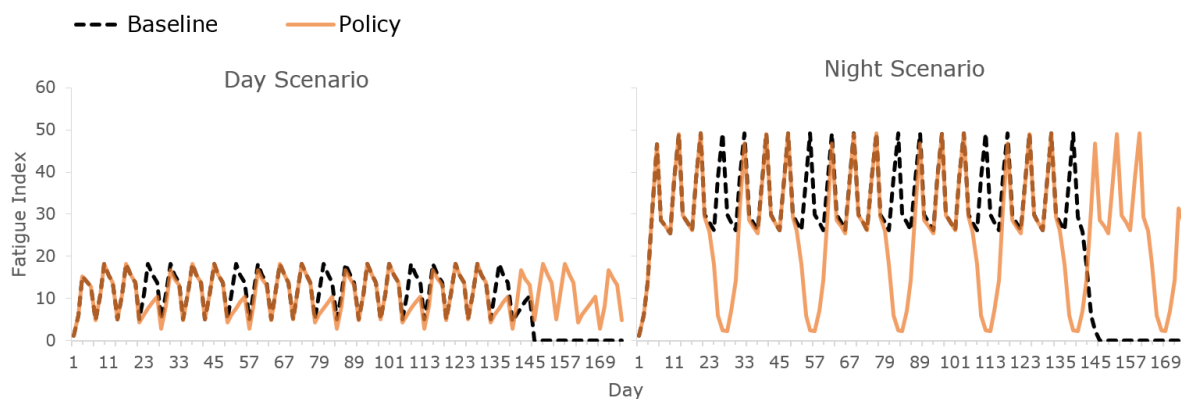


Notes: Day and night scenarios refer to different driving schedules. The day scenario has a constant shift starting time of 8am, resulting in daytime driving hours. The night scenario has a staggered shift starting time, resulting in some daytime and some night time driving hours. See Annex D for full details.

Source: Ricardo calculations using the HSE tool (HSE, 2006)

Similarly, in the case of 6 month reference period (Figure 6-7), the fatigue index is lower for both the day and night scenarios for most of the period, with the exception of the last 5.2 weeks where, under the baseline scenario no work takes place. Still, on average under the 6 month reference schedule the day scenario baseline has an average fatigue index of 12.3, compared to 10.9 for the policy, giving a reduction of 1.4 (-12%). For the night scenario, an even bigger difference is seen, with a baseline average fatigue index of 32.5, compared to 25.8 for the policy, giving a reduction of 6.7 (-21%).

**Figure 6-7: Evolution of fatigue index for changes to the calculation of working time, 6-month reference period**



Notes: Day and night scenarios refer to different driving schedules. The day scenario has a constant shift starting time of 8am, resulting in daytime driving hours. The night scenario has a staggered shift starting time, resulting in some daytime and some night time driving hours. See Annex D for full details.

Source: Ricardo calculations using the HSE tool (HSE, 2006)

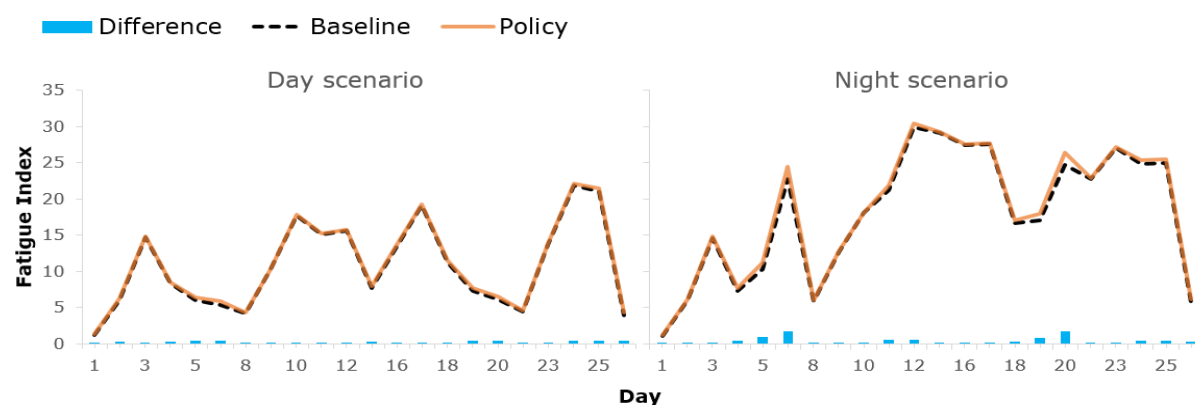
Overall, the schedules under the policy measure resulted in a decrease in the average fatigue index by 3.6 (-14%) over 4 months, or by 4.1 (-16%) over 6 months, suggesting that the two measures are likely to have a net positive impact on driver fatigue.

**Measure (2)** replaces the previous **measure (3)** from PP1, and instead lays down requirements for drivers to have access to adequate accommodation (provided/paid for by the employer), so that drivers should benefit from better quality rest due to

higher quality facilities. Research indicates that the quality of sleep is just as important as the quantity, highlighting the importance of ensuring that drivers have access to appropriate rest conditions (Hanowski et al, 2003). According to the survey of drivers, 127 of the 320 respondents (around 40%, with no significant differences in this proportion between respondents from different countries) felt that this measure would increase their ability to avoid fatigue and get adequate rest. Overall therefore, both the literature and views from affected stakeholders suggest that this measure would help to reduce fatigue and stress.

**Policy measure (5)** would allow drivers to have greater flexibility in how they take their breaks. Drivers would be able to split their required 45 minutes of break time for every 4.5 hours driving into three breaks of 15 minutes. Figure 6-8 presents the impact on the fatigue index – showing that the option has minimal impacts on fatigue. There is a very small increase in the fatigue index of 0.7 (+2.4% on average), but overall this is considered to be negligible, especially if considered in concert with the benefits of greater flexibility to take breaks that can be more conveniently scheduled for drivers.

**Figure 6-8: Evolution of fatigue index from changes to break time**



Notes: Day scenario has regular shifts starting at 8am; night scenario has varying shift times that result in some night work. See Annex D for full details.

Source: author calculations, HSE tool (HSE, 2006)

In contrast to the quantitative results above that indicate a minimal impact, several interviewed stakeholders expressed concern that having only 15 minutes break would not be sufficient for drivers to recover from fatigue (ETF, union from IT, NL and SL, authority from RO). Conversely, others were supportive (UETR, EEA, PL undertaking, SL authority). Similarly, more drivers responding to the survey felt that this would decrease their ability to avoid fatigue and get adequate rest (161 out of 331, 49%) compared to those that felt it would increase (100 out of 331, 30%)<sup>151</sup>. However, it should be noted that this flexibility was also possible in earlier versions of the legislation – hence, purely from consideration of the level of fatigue involved – such arrangements had previously been considered acceptable. On the basis of this and the quantitative results, it is concluded that the impact on fatigue is not significant.

In summary, **PP2 is likely to result in a meaningful direct reduction in fatigue for drivers**, as shown below. In addition, to the extent that measures of PP2 are expected to result in additional improvements in compliance over PP1 through the overall improvement of enforcement and increased clarity, fatigue would also likely reduce due to better respect of the rules.

<sup>151</sup> Out of 124 UK respondents, 41% felt it would decrease their ability to get adequate rest, compared to 31% who felt it would be increased. For the 130 NL respondents, 69% felt it would decrease their ability to get adequate rest, compared to 19% who felt it would be increased; out of 23 EU-13 respondents, 35% felt it would decrease their ability to get adequate rest, compared to 52% who felt it would be increased.

Similarly, PP2 is expected to lead to **reduced periods away from home**, so it can be expected that fatigue and stress will also reduce, since long periods away from home have been found to increase drivers' stress (EU-OSHA, 2010b).

**Table 6-17: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Positive impact due to reduction of stress (clearer rules, more possibility to reach home base and higher minimum standards of accommodation).
(1) Calculating average minimum regular weekly rest of 45 h and on adequate accommodation (13) Reduce the reference period used for a calculation of the maximum average weekly working time to 4 weeks	Combined effect of fatigue decrease of -30% of a short term (4 week) period. Longer term reduction of fatigue as a result of measure 13 of 14% over a 4 month period and 16% over a 6 month period.
(2) Forbid spending the regular weekly rest of over 45 hrs in the vehicle and oblige employer to either provide or pay for adequate accommodation	Positive impact due to reduction of driver fatigue due to higher minimum standards of accommodation (that is paid for by the employer).
(5) For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged.	Negligible impact – marginal increase in fatigue index (+2%).
All measures that improve compliance with the rules	Positive impact from small positive impact on compliance.
All measures that reduce periods away from home	Significant positive impact on periods spent away from home.
Overall impact of PP2	Quantitative decrease in fatigue by up to 30% from the combined measures over 4 week period. Longer term reduction of 14% to 16% from measure 13. Qualitative improvements in stress and fatigue due to clearer legal framework, higher standard of accommodation that is also paid for, and improved possibilities to spend rest at home/base.

### 6.1.3.3. PP3 - Targeted revisions of the social legislation

In terms of the quantitative impacts of fatigue, PP3 should have the same impacts as for PP2, since it contains **measures (1), (5) and (13)**.

In addition, other possible measure that may have an impact on fatigue are:

- (6) Adapt '12-day rule' in international occasional passenger transport by coach.
- (7) Allow for flexibility for domestic occasional transport of passengers by coach:
  - (7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.
  - (7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.

- (17b) Forbid all performance based payment (based on distances travelled / amount of goods carried).

As before, improvements in compliance with the rules and/or reductions in periods away from home over PP2 should also contribute to reductions in fatigue and stress.

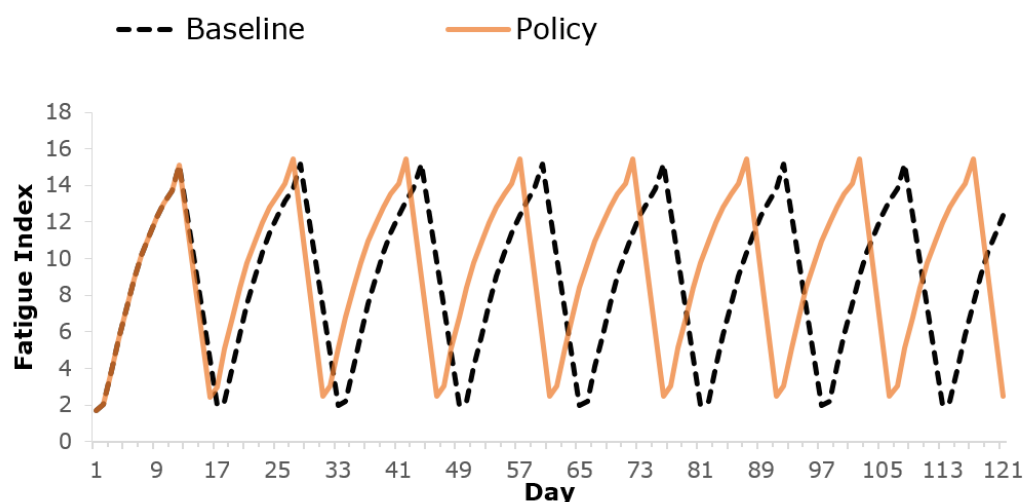
**Measures providing flexibilities for international and domestic occasional passenger transport by coach (6 and 7)** may have opposing impacts on fatigue and stress:

- Improved flexibility could help to reduce stress related to coping with passengers' needs and/or with external factors influencing the journey.
- Such a derogation could encourage longer periods away from home/base (as argued above, this may impact on sleep quality and fatigue).

Concerning **measure (6)**, several drivers responding to the survey for this study commented that the proposal would have negative implications for fatigue/safety (20 from NL out of all 326 respondents, although these were unprompted comments), while the coordinated response from NL considered that this measure would lead to drivers having to work more days per year, with detrimental impacts on fatigue.

Figure 6-9 presents the quantitative analysis of the impact on the fatigue index from **measure (6)**. It can be seen that, in line with comments from stakeholders, it is possible for drivers to fit in more work in the same amount of time; therefore, the cycles for the baseline and the policy get increasingly out of sync. An increase in the fatigue index can be seen at the start of each derogation, as a result of the shorter weekly rest (69 hours compared to 90 hours). Despite the higher starting point, the difference between the measure and the baseline gradually diminishes over the 12-day period, resulting in only a small increase in the peak fatigue index by the 12<sup>th</sup> working day (+0.3, or 2% higher). This is because the regular daily rest reduces fatigue proportionally (a higher fatigue index is reduced more quickly than a lower fatigue index – i.e. rest is more beneficial the more tired the driver is). Overall, the measure results in an average increase in fatigue of +0.7 (8.0%) compared to the baseline.

**Figure 6-9: Evolution in fatigue index from changes to 12-day derogation for occasional passenger transport**



Notes: See Annex D for full details.

Source: author calculations, HSE tool (HSE, 2006)

In response to open questions on in the survey of drivers, several respondents raised concerns about increased fatigue for domestic coach drivers regarding **measure (7)** (14 from NL, 1 from UK). Concerning measure (7a), the coordinated response from NL drivers noted that this would only affect a few countries large enough to support 12-day trips, and also called for the measure to explicitly be restricted to one group

(i.e. not including multiple groups/clients). With respect to the latter, previous negotiations between ETF and IRU on the re-introduction of the 12-day derogation for international trips was that it should only be used in the context of a single trip, and that this was one of the most important conditions that would ensure there were not negative social impacts on drivers (SDG, 2009). Regarding measure (7b), the coordinated response noted that drivers already work 6 days in a row and the respondents felt that 8 days was not acceptable. Overall, as discussed above the response from drivers (mainly based in NL) indicates that they feel **measure (7)** would have negative impacts on fatigue. This is also reflected in the quantitative analysis, shown in Table 6-18. The proposed changes from measure (7a and 7b) would cause a significant increase in average driver fatigue (respectively of 33% and 20%) for affected drivers. At the same time, the peak fatigue levels in absolute terms are typically lower than those seen for freight transport, since coach drivers spend more time on activities other than driving compared to drivers involved in freight.

**Table 6-18: Change in average and peak fatigue index from measure (7)**

Fatigue Index	Baseline	(7a) 12-day	(7a) Difference from baseline	(7b) 8-day	(7b) Difference from baseline
Average	7.1	9.4	+2.3 (+33%)	8.5	+1.4 (20%)
Peak	11.6	15.5	+3.9 (+34%)	13.7	+2.1 (18%)

Notes: See Annex D for full details.

Source: author calculations, HSE tool (HSE, 2006)

At the same time, as already indicated in section 6.1.2.3, the 12-day derogation is not intensively used in most Member States (European Commission, 2014)<sup>152</sup>. This probably suggests that the number of drivers affected will be relatively limited.

**Measure (17b)** mainly affects fatigue through changing the compliance level, and hence its impact here is considered as part of the general effects on compliance. In addition, performance-related pay is seen in its own right as a cause of stress by drivers (Ricardo et al, 2016) – hence there would be additional benefits in terms of stress reduction.

In addition, to the extent that measures of PP3 are expected to **result in additional improvements in compliance** over PP2 (see Section 6.1.1.3) through the overall improvement of enforcement and increased clarity, fatigue would also likely reduce due to better respect of the rules. The measures of PP3 are expected to result in significant **reductions in periods away from home** for drivers, although in the case of drivers affected by the proposed measures on coach transport, periods away from home may increase, leading to higher fatigue/stress for some drivers.

**Table 6-19: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Quantitative decreases in fatigue by up to 30% from the combined measures. Qualitative improvements in stress and fatigue due to clearer legal framework and improved possibilities to spend rest at home/base.
(6) Adapt '12-day rule' in international occasional	Quantitative increase in fatigue of 8% for affected drivers.

<sup>152</sup> Only five Member States (EE, LT, LV, LU, SE), out of the 15 Member States that provided quantifiable data, indicated a medium frequency of use (3 in a scale from 0 to 5) while in all other cases the reported figures indicate a less intensive use of the provision.

Measure	Impact
passenger transport by coach	
(7) Allow for flexibility for domestic occasional transport of passengers	Significant increases in fatigue for affected drivers (33% for 7a and 20% for 7b) for affected drivers.
All measures that improve compliance with the rules	Positive impact due to increase in compliance from the combination of measures.
All measures that reduce periods away from home	Expected to result in significant reductions in periods away from home for drivers, although in the case of drivers affected by the proposed measures on coach transport, periods away from home may increase, leading to higher fatigue/stress for some drivers.
Overall impact of PP3	Freight: decreases in fatigue of up to -30% from PP2. Passenger: increase in fatigue of +8% for international drivers, and of +20-33% for domestic coach drivers subject to the derogations.

#### 6.1.3.4. PP4 - Revisions to PWD – horizontal policy option

The measures of PP4 are not expected to have direct effects on fatigue. However, the options may increase long periods away from home compared to the baseline (see Section 5.3.3), leading to an increase in stress and fatigue (EU-OSHA, 2010b).

**Table 6-20: Summary of impacts from PP4**

Measure	Impact
Measures (18) and (19)	Negative impact on fatigue and stress due to small increase in periods away from home.

#### 6.1.4. Impacts on road safety and occupational health

The impacts on road safety and occupational health are analysed in terms of the following aspects:

- **Measures that impact on fatigue:** The qualitative analysis of possible impacts in this section mainly draws from the previous assessment of fatigue. Driving is highly susceptible to fatigue because it involves many of the skills that are impaired by fatigue, such as vigilance (DfT, 2014). Numerous studies provide strong evidence linking fatigue of drivers to increased accident risks and poorer health (ETSC, 2011), (SWOV, 2011), (Smolarek & Jamroz, 2013), (Stutts et al, 2003), (Knauth, 2007).
- **Measures that impact on risk:** The inputs to the HSE tool as described in Annex B were used; however, the risk index provides a slightly different interpretation of the impacts compared to the fatigue index, since it indicates the relative risk of an incident occurring on a shift. The outputs of the tool therefore provide a quantitative indicator of the risk of accidents.
- **Measures that affect driving behaviour:** for example, performance-based payments that might lead to riskier driving.

##### 6.1.4.1. PP1 – Clarification of the legal framework & improve cooperation

To the extent that **fatigue is reduced** (as already analysed above), the risk of road accidents should also decrease. This in turn has implications for road safety – both of the drivers themselves and other road users (due to the higher mass of HGVs and buses/coaches, accidents tend to be more serious and most of those killed are other road users (ETSC, 2013); (Panteia, 2014)).

None of the measures in PP1 are expected to result in changes to the risk index as a result of changes to driver schedules.

Other measures that might have an additional impact on risk are:

- **Measure (3)** – allow for spending regular weekly rest in the vehicle. According to an association (CZ) interviewed for this study, this measure would contribute to better road safety because the current situation leads to drivers feeling like they need to ensure they are not in countries that forbid spending weekly rest in the vehicle (e.g. to avoid fines), and therefore driving faster and/or violating other rules. Several respondents to the survey of drivers (10 from UK, 2 from FR, 1 from RO, 6 from NL) commented (unprompted) that they felt this measure would contribute to better road safety.
- **Measure (17a)** – allow Member States to forbid performance-based payment. As noted in (Ricardo et al, 2016), these payments are widespread and even though the Regulation only permits them in cases where they do not endanger road safety, it is impossible to actually prove that this is the case. Feedback from interviews conducted for this study confirmed that several unions (from IT, NL, BE) think such payments endanger road safety, even if the link is difficult to prove. As such, there is a risk to road safety under the current rules that would be alleviated in cases where Member States opted to forbid these payments.

**Table 6-21: Summary of impacts from PP1**

Measure	Impact
Measures that reduce fatigue (analysed above)	Small positive impact on fatigue (and therefore reduction in accident risk) due to better possibilities to reach home base.
(3) Allow for spending the regular weekly rest in the vehicle	Improved safety due to less speeding / more responsible driving in countries that previously forbade spending weekly rest on-board vehicle.
(17a) Allow Member States to forbid (on their territories) all performance based payment	To the extent that the measure is taken up – improved safety due to more responsible driving and lower incentives to break road social rules.
Overall impact of PP1	Small positive impacts due to more responsible driving (reduced incentives to speed in order to avoid countries that forbid spending weekly rest on-board vehicles and due to performance-based payment) and possibility to reach home base in case of exceptional circumstances.

#### **6.1.4.2. PP2 - Strengthening of enforcement and changes to obligations**

Measures included in PP2 that are expected to have significant impacts on safety include:

- (1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks and require that this should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest.
- (2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest.
- (5) For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged.

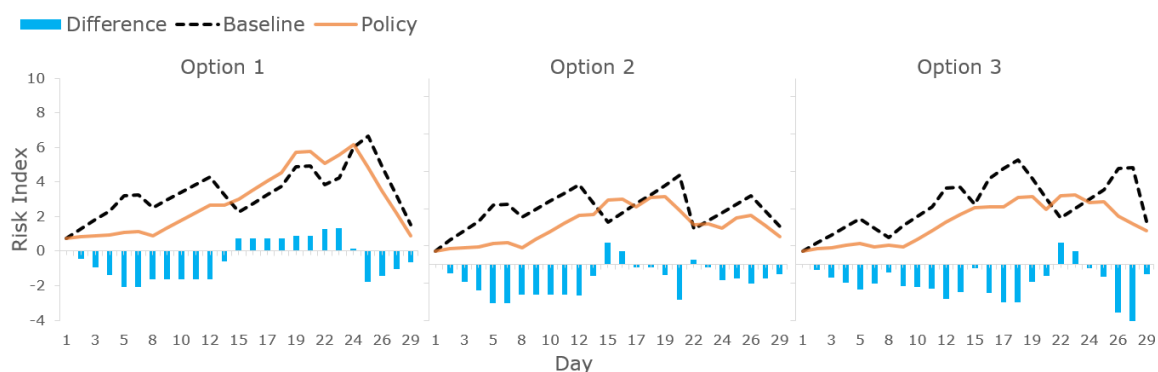
- (13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks.

As was the case in relation to the assessment of the impact on fatigue (section 6.1.3.2), we have examined the combined impact on the level of risk of **measures (1) and (13)**.

Figure 6-10 presents the result of the analysis for the three options. In all cases, the risk index is lower for the combined policy schedules than the baseline schedules. The average risk indexes for the policy options 1, 2, and 3 see a decrease of 0.5 (15%), 0.8 (28%), and 1.0 (30%) respectively. Policy measure (1) increases the average weekly rest but this results in shorter working weeks, and therefore more hours per day possible while keeping a 60 hour working week. However, any negative impacts are compensated by the positive effects of measure (13), since the shorter working week does not mean more working hours each day as there is also fewer working hours possible each week. Furthermore, if drivers still want to maximise their driving time of 56 hours weekly and 90 hours bi-weekly, it becomes very unlikely that a driver works more than 10 hours a day. Since the risk index increases linearly for shifts longer than 8 hours, lowering the average working hours a day reduces the average risk index.

Over all three options, the change in average risk index from measures (1) and (13) combined is -0.8 (-24%). This is because the impact of measure (13), which effectively reduces weekly working hours, is even greater over a 5-day week than a 6-day week, as the reduction in working time each day is greater.

**Figure 6-10 Evolution of risk index under baseline and combination of measures (1) and (13)**



*Notes: Options refer to different configurations of taking weekly rest within the current rules. Option 1 (21h to be compensated within 3 weeks, from week 1 to week 3); option 2 (21h added to daily rest of 9h); option 3 (21h to be compensated within 3 weeks, from week 2 to week 5, where week 5 is outside of the assessment period). See Annex D for full details*

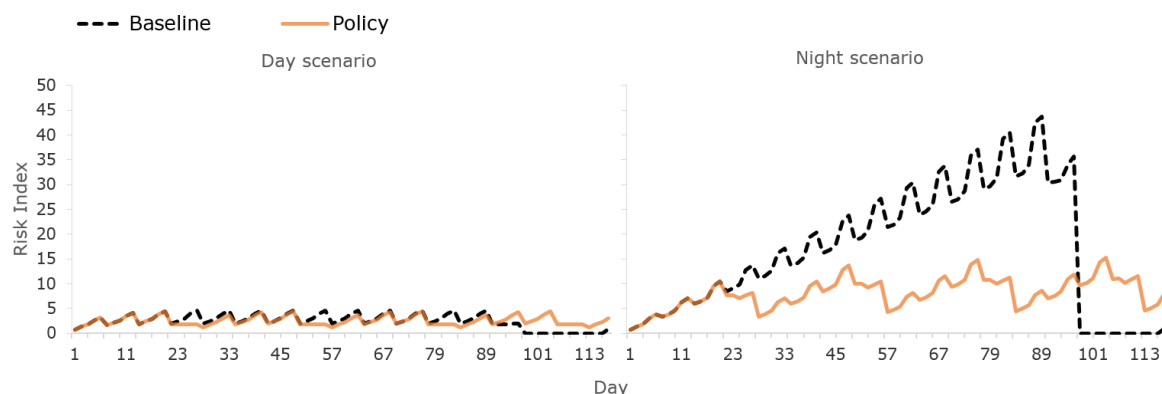
*Source: Ricardo calculations using HSE tool (HSE, 2006)*

As was the case in relation to the assessment of the impact on fatigue (section 6.1.3.2), we have also examined the longer term impact on the level of risk of **measure (13)** on excessive working hours over a 4 and 6 month driving schedule.

Figure 6-11 presents the results of the analysis for day and night scenarios over a **4 month reference period**. The shorter working hours every 4th week under the policy measure reduces the risk index, and has a small reduction in risk index the following week. For the night scenario, the change is significantly larger as a result of the increased risk of night work, which amplifies over the length of the schedule (with the exception of the last weeks where, under the baseline scenario, no work takes place). In the case of the 4-month reference period, the day scenario had a baseline average index of 3.0, which is reduced to 2.5 for the policy, a change of -0.4 (-14.9%). The

difference was even greater for the night scenario, with a baseline average risk index of 20.1, reduced to 8.2 for the policy, a change of -12.0 (59.5%).

**Figure 6-11: Evolution of risk index for changes to the calculation of working time, 4-month reference period**

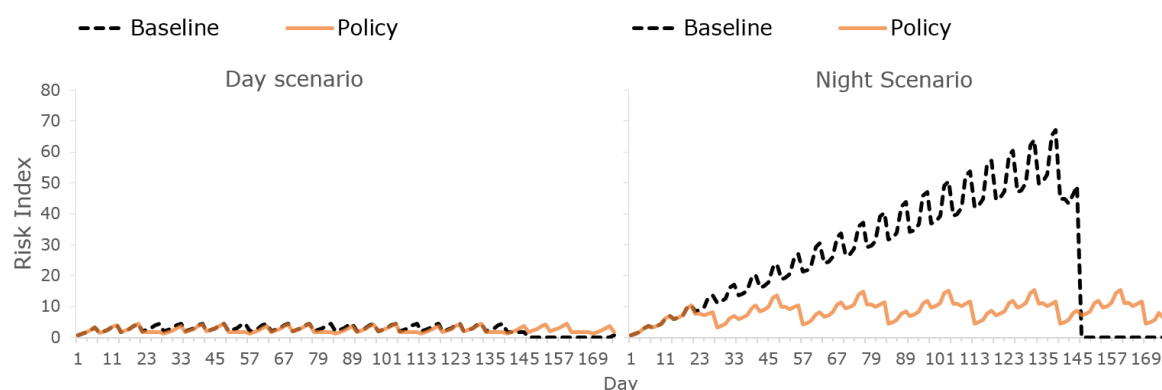


*Notes: Day and night scenarios refer to different driving schedules. The day scenario has a constant shift starting time of 8am, resulting in daytime driving hours. The night scenario has a staggered shift starting time, resulting in some daytime and some night time driving hours. See Annex D for full details.*

*Source: Ricardo calculations using HSE tool (HSE, 2006)*

In the case of the **6 months reference period** (see Figure 6-12), again the shorter working hours every 4th week under the policy measure leads to a small reduction in risk index for the day scenario and to significantly larger reduction for the night scenario. The day scenario had a baseline average index of 3.0, which reduced to 2.5 for the policy, with a change of -0.5 (-16.4%). Again, the difference was even greater for the night scenario, with a baseline average risk index of 30.1, reduced to 8.6 for the policy, a change of -21.5 (71.3%).

**Figure 6-12 Evolution of risk index for changes to the calculation of working time, 6-month reference period**



*Notes: Day and night scenarios refer to different driving schedules. The day scenario has a constant shift starting time of 8am, resulting in daytime driving hours. The night scenario has a staggered shift starting time, resulting in some daytime and some night time driving hours. See Annex D for full details.*

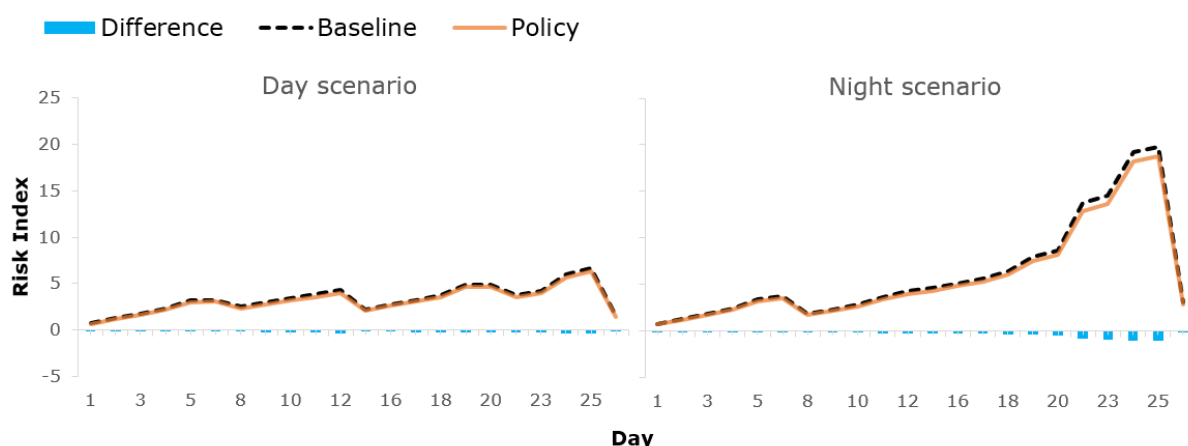
*Source: Ricardo calculations using HSE tool (HSE, 2006)*

Overall, the schedules under the policy measure (13) resulted in a decrease in the average risk index by 6.2 (54%) over 4 months, or by 11.0 (66%) over 6 months, suggesting that the two measures are likely to have a net positive impact on risk levels.

While it is not possible to quantify, additional positive impacts in terms of risk reduction should be expected as compared to PP2, due to **measure (2)** - forbid spending the regular weekly rest of over 45 hrs in the vehicle and oblige employer to either provide or pay for adequate accommodation. In turn, this will result in slightly higher reductions in risks of accidents. The survey of drivers also supports this analysis: 136 out of 321 respondents (42% on average – mainly EU-15 respondents<sup>153</sup>) felt that this measure would improve their safety conditions, including road safety.

Figure 6-13 presents the impact on the risk index from **measure (5)** - changes to break time. A small reduction in the risk index was observed that increased over the working week (5.7% reduction on average). Under the proposed policy, shorter, more regular breaks result in shorter periods between breaks, and therefore a lower risk index.

**Figure 6-13: Evolution of risk index from changes to break time**



*Notes: Day scenario has regular shifts starting at 8am; night scenario has varying shift times that result in some night work. See Annex D for full details.*

*Source: author calculations, HSE tool (HSE, 2006)*

Since PP2 contains all of the policy measures analysed above, the net impact on risk is uncertain. Policy measure (1) could result in an increase in risk, while measures (3) and (13) could result in a reduction. Much also depends on the individual schedules given to drivers, as well as the nature of their work. It can be noted, however, that the average magnitude of impacts in the scenarios considered is very balanced in the two directions (i.e. +44% for measure 1, compared to -41% for measure 13).

**Table 6-22: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Small positive impacts due to more responsible driving (reduced incentives to speed in order to avoid countries that forbid spending weekly rest on-board vehicles and due to performance-based payment) and possibility to reach home base in case of exceptional circumstances.

<sup>153</sup> Of the 23 EU-13 respondents, 15 (65%) felt that this measure would improve their safety. Although the sample size is far too small to be representative, this may suggest that the measure is more beneficial for this group

Measure	Impact
(1) Calculating average minimum regular weekly rest of 45 h and on adequate accommodation (13) Changes to the calculation of working time	Combined effect of (1) and (13) – average risk reduction of 24%.  Longer term reduction of risk as a result of measure 13 of 54% over a 4 month period and 66% over a 6 month period.
(2) Forbid spending the regular weekly rest of over 45 hrs in the vehicle and oblige employer to either provide or pay for adequate accommodation	Positive impact due to reduction of driver fatigue, thanks to higher minimum standards of accommodation (paid for by the employer).
(5) Changes to breaks	Small decrease in average risk index (-6%).
Overall impact of PP2	Additional and significant positive impact on risk index due to combined effect of measures 1 and 13 (decrease by 24%) with additional positive impact from measures 2 and 5.

#### 6.1.4.3. PP3 - Targeted revisions of the social legislation

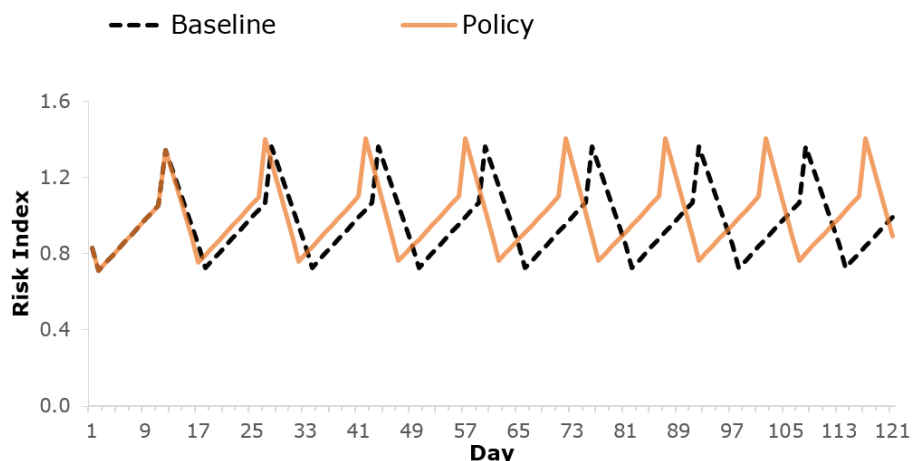
In terms of the quantitative impacts of fatigue, PP3 will have the same impacts as for PP2, since it contains **measures (1), (5) and (13)**.

Additional measures that may also impact on safety are:

- (6) Adapt '12-day rule' in international occasional passenger transport by coach
- (7) Allow for flexibility for domestic occasional transport of passengers by coach:
  - (7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.
  - (7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.
- (17b) Forbid all performance based payment (based on distances travelled / amount of goods carried)

Concerning **measure (6)**, several drivers responding to the survey for this study considered that the proposal would have negative implications for safety (20 from Netherlands). The main mechanism is to do with fatigue, as discussed in the previous section. In addition, the quantitative analysis of risk is shown in Figure 6-14. As seen in the analysis of fatigue, there is similarly an increase in the risk index at the start of each derogation, as a result of the shorter weekly rest (69 hours compared to 90 hours). The risk index is also significantly lower overall than the figures seen for freight transport, due to the reduced driving time and other work. The average risk index for the increased by 0.04 (+4%) under the policy measure. The peak risk index increased by 0.05 (+4%).

**Figure 6-14: Evolution in risk index from changes to 12-day derogation for occasional passenger transport**



Notes: See Annex D for full details.

Source: author calculations, HSE tool (HSE, 2006)

Table 6-23: Change in average and peak risk index from measure (7) presents the key findings from the analysis of the impact on the risk index from **measure (7)**. The average risk index for the increased by +0.04 (4%) for 12-day and +0.05 (5%) for 8-day derogations. The peak risk shows larger changes respectively of 20% and 12%, but the absolute levels remain well below those seen in the analysis of freight schedules.

**Table 6-23: Change in average and peak risk index from measure (7)**

Risk Index	Baseline	(7a) 12-day	Difference from baseline	(7b) 8-day	Difference from baseline
Average	0.92	0.96	+0.04 (4%)	0.97	+0.05 (5%)
Peak	1.18	1.41	+0.23 (20%)	1.32	+0.14 (12%)

Although statistical data on coach accidents is extremely limited, the available evidence suggests that long distance coach is one of the safest forms of transportation and fatigue is responsible for only a very low proportion of accidents (SDG, 2009) – and therefore, previous analysis has concluded that the 12-day derogation in international transport has marginal (if any) impacts on safety. On this basis, application of the 12-day rule to domestic transport has previously been requested by the European Parliament, since the impact on road safety is not related to the international nature of the transport operation (European Commission, 2014).

Similarly, **measure (17b)** will have a stronger beneficial impact on safety compared to the voluntary version already analysed in PP1, given that all Member States will have to forbid such payments.

**Table 6-24: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Positive impact on risk index (increases due to combined impact of measures 1 and 15 and additional positive impacts of 2 and 5).

Measure	Impact
	Slight positive impact due to improved compliance with the rules.
(6) Adapt 12-day rule	Increase in average risk of 4% for affected drivers.
(7) Flexibility for domestic occasional coach transport	Increase in average risk of 4-5% for affected drivers.
(17b) Forbid all performance based payment	Improved safety due to more responsible driving and lower incentives to break road social rules.
Overall impact of PP3	Freight: slight positive impact (in addition to measures under PP2) due to lower incentives from performance-based pay to break rules.  Passenger: increase in risk of 4% for international coach drivers and 4-5% for domestic coach drivers subject to the derogations.

#### 6.1.4.4. PP4 - Revisions to PWD – horizontal policy option

The measures of PP4 are not expected to have direct effects on road safety and occupational health. However, to the extent that the option may increase fatigue (see Section 6.1.2) from increased, drivers may benefit from a small reduction in risk of accidents.

**Table 6-25: Summary of impacts from PP4**

Measure	Impact
Overall impact of PP4	Minor and indirect negative impact due to small increase in fatigue.

#### 6.1.5. Impacts on working conditions

Almost all of the proposed policy measures are relevant (to a greater or lesser extent) for the assessment of working conditions. The impacts have been analysed through evaluating the following three factors, all of which contribute to overall working conditions:

1. **Impacts due to fatigue and stress** (see Section 6.1.1 on fatigue). Fatigue and stress are important components of overall working conditions. In addition, they are both found to be associated with aspects of working conditions that go beyond issues of stress and tiredness: including being correlated with adverse health effects such as cardiovascular disease, substance abuse, mental health issues, retirement on grounds of disability and chronic sleeping problems (Broughton et al, 2015).
2. **Impacts on periods away from home** (see Section 6.1.2), which has impacts on working conditions beyond considerations of fatigue, through detrimental impacts on drivers' social lives and isolation from social support networks. As noted above, long periods away from home may also contribute to poorer quality of sleep and accumulated fatigue.
3. **Use of performance-based payments**, where changes to the rules may result in changes to drivers' remuneration and stress levels – and lower wages are associated with poorer working conditions (EU-OSHA, 2010).

#### **6.1.5.1. PP1 – Clarification of the legal framework & improve cooperation**

Under PP1, several options (previously analysed) are expected to contribute to reductions in *fatigue and stress*. In particular, these result from improved flexibility of the rules to adapt to unforeseen circumstances and ensuring access to adequate accommodation during rest periods. As noted above, reductions in fatigue and stress would contribute to better working conditions through reductions of adverse health impacts (Broughton et al, 2015).

Measures that have additional impacts that are relevant to working conditions in PP1 are:

- (3) Allow for spending the regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.
- (16) Define operations of occasional non-professional driver for private purposes and exclude them from the scope of the Regulation 561/2006.
- (17a)- Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried).

**Measure (3)** - Allow for spending the regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances – would have impacts on working conditions depending on the quality of their vehicle cabins compared to available accommodation. A primary concern is that it would be difficult to prove the free choice of the driver (see Section 6.1.1 on compliance). If drivers are obliged to accept staying in the vehicle when it is not their free choice, working conditions could suffer as a result.

**Measure (16)** - Define operations of occasional non-professional driver for private purposes and exclude them from the scope of the Regulation 561/2006 – caused concern among some interviewees about the potential for abuse and unfair competition, with consequent negative impacts on working conditions<sup>154</sup>. Nevertheless, the scope for abuse should be limited by the nature of the definition (e.g. that there should not be payment in return for the services or any link with commercial activity - (Ricardo et al, 2016)), and this measure is a clarification of the existing legal interpretation<sup>155</sup>, which suggests that the overall impact on working conditions would not be significant. The impact of **measure (17a)** – allow Member States to forbid (on their territories) all performance based payment – has several potential ways in which it can affect working conditions *should Member States choose to implement this measure*:

- The introduction of the measure could reduce stress caused by performance-related pay (which is a key contributor to stress, together with financial incentives for drivers to break the rules - (Ricardo et al, 2016)). This could improve working conditions related to stress, but only in those Member States that choose to implement the measure.
- The introduction of the measure has an uncertain impact on wages – operators may or may not choose to compensate reductions in drivers' variable pay with increases in fixed wages.

Variable components make up a very significant proportion of wages, particularly in the case of EU-13 drivers (55% on average for EU-13 drivers, compared to 21% for EU-15 (Ricardo et al, 2016)), meaning that if employers did not (fully) compensate drivers for loss of performance-based components, there could be a detrimental

---

<sup>154</sup> Transport unions from AT, BE, NL, SL; industry association from ES

<sup>155</sup> i.e. "the provisions of [Regulation 561/2006] apply essentially to professional drivers and not to individuals driving for private purposes who are not professional heavy goods vehicle drivers..." from proceedings of Case C-317/12 against Daniel Lundberg. However, Member States are free to apply the rules to drivers that are not explicitly covered (Clarification Note 2).

impact on wages and working conditions. Conversely, it is feasible that the measure could result in better wages for drivers – i.e. more predictable wages, and with reduced incentives to break the road social rules (with concurrent risks of being fined). It is impossible to know in advance what choices operators would make regarding changes to payrolls and wage structures, and there are several market trends operating in opposite directions:

- High competition in the sector is driving cost-cutting – including downward pressure on wages (TRT, 2013); (AECOM, 2014a)- which implies that abolition of variable wage components may not be fully compensated.
- Widely reported driver shortages (Ricardo et al, 2016) may lead to a higher chance that at least some of the variable wage component would be compensated, due to the need for firms to attract and retain skilled staff.

Feedback from the interviews with individual undertakings and associations did not shed any further light on this issue – respondents answered that performance-based pay was not used in their company/country<sup>156</sup>. Comments from interviewed trade unions indicated they felt that the measure would not result in less money for drivers (Belgium and Romania) or would help to address problems of inequality (Netherlands). Drivers themselves, responding to the survey, indicated an expected neutral impact on their wages – with a weighted average expected reduction in pay of 2% across all 315 respondents<sup>157</sup>; however, many respondents were from countries that do not feature highly among those of concern when considering performance-based pay (i.e. UK and Netherlands).

Overall, the effect in practice is highly uncertain, but on balance it seems likely that drivers would be partly compensated if performance-based payment is banned. If the measure results in lower wages for drivers, it could also have other knock-on effects with regard to wider non-wage factors that contribute to working conditions – for instance, an international database review found that drivers who are paid less are more likely to be alcohol and illicit drug users (ILO, 2015). In addition, the impacts if the measure is voluntary depend on whether or not Member States choose to implement this measure.

**Table 6-26: Summary of impacts from PP1**

Measure	Impact
Measures having impact on fatigue and stress	Small improvements in working conditions due to reductions in fatigue and stress.
Measures having impact on periods away from home	Negligible impact.
(3) Allow for spending a regular weekly rest in the vehicle under certain conditions	Uncertain. Depends on quality of drivers' cabin compared to available accommodation, and effectiveness of proving free choice of driver.
(16) Defined occasional driver and operations for private purposes excluded from the scope of the Regulation 561/2006	No significant impacts expected.
(17a) Use of performance-based payments	Uncertain. Possible reduction (depending on uptake by MS) in variable pay, which may or may not be compensated by increases in fixed pay. Greater certainty for drivers and lower incentives to break rules (as well as lower risk of fines).

<sup>156</sup> Undertakings from DE, HU, PL, SL; industry associations from PL, FR, AT, DK

<sup>157</sup> Weighted average for the UK (122 respondents) was -2%; for the Netherlands (119 respondents) was -4%, and for EU-13 (23 respondents) was +3%

Measure	Impact
Overall impact of PP1	Small positive impact due to reductions in fatigue/stress.

#### 6.1.5.2. PP2 - Strengthening of enforcement and changes to obligations

The measures of PP2 will contribute to a **reduction in fatigue** for drivers (as analysed above). This will contribute to reducing the main problems in the sector including: insufficient rest, time spent away from appropriate facilities, and high strain coupled with low autonomy – all of which affect the health of workers in the international road haulage sector (Broughton et al, 2015). Respondents to the survey of authorities were strongly supportive of the changes to the reference period in **measure (13)** contributing to improved working conditions for drivers (25 out of 30 respondents agreed<sup>158</sup>).

Measures to **enhance enforcement** (see Section 6.1.1 on compliance) will contribute to a reduction in illegal activities (already considered in the analysis of fatigue). There may be additional benefits for working conditions beyond this, since illegal activities are often associated with precarious employment contracts and circumvention of labour and social rights (Broughton et al, 2015).

**Measure (2)** will forbid spending regular weekly rest of over 45hrs in the vehicle and oblige employers to provide/pay for adequate accommodation. Access to appropriate facilities plays an essential role in ensuring decent working conditions, and the lack of such facilities can have negative consequences for all transport workers, particularly women (International labour organization, 2015). The survey of drivers revealed that 43% (136 out of 320<sup>159</sup>) felt that this measure would contribute to improvements in their working conditions. At the same time, the majority of respondents (166 out of 319, 52%<sup>160</sup>) felt that this measure would not have a material impact on their monthly pay. Although the number of respondents from the EU-13 was too low to be representative, the survey results could suggest that these drivers expect to benefit slightly more than EU-15 drivers, while at the same time tending to expect a more negative impact on pay (see detailed breakdowns in the footnotes).

Drivers may be away from home, family, friends and other support networks for several days or weeks at a time, which contributes to lonely and demanding working conditions (ILO, 2015). PP2 is expected to lead to significant reductions in periods away from home, and reducing periods away from home is therefore an important part of improving overall working conditions.

**Table 6-27: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Small positive impact due to reductions in fatigue/stress.
Measures having impact on fatigue and stress	Decreases in fatigue by up to 35%, plus improvements in issues related to insufficient rest, high strain and low autonomy.
Measures having impact on periods away from home	Significant positive impact on periods spent away from home.
Overall impact of PP2	Significant positive impacts due to significant reductions in fatigue/stress and reductions in periods away from home.

<sup>158</sup> Only CZ, HU, LU, NL and NO felt there would be no contribution

<sup>159</sup> Specifically, 52 out of 117 (44%) UK respondents, 46 out of 129 (36%) NL respondents and 14 out of 23 (61%) EU-13 respondents

<sup>160</sup> Specifically, 68 out of 118 (58%) UK respondents, 65 out of 127 (51%) NL respondents and 9 out of 23 (39%) EU-13 respondents

### 6.1.5.3. PP3 - Targeted revisions of the social legislation

PP3 will have the same impacts on working conditions as for PP2, since it contains **measures (1), (5) and (13)**. Additional measures in PP3 that are expected to have further implications for working conditions are:

- (6) Adapt '12-day rule' in international occasional passenger transport by coach
- (7) Allow for flexibility for domestic occasional transport of passengers by coach:
  - (7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.
  - (7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.
- (17b) Forbid all performance based payment (based on distances travelled / amount of goods carried)

PP3 will have stronger impacts than PP2 in terms of **performance-based pay – measure (17b)**, since it will be forbidden in all Member States in this package. However, the direction and magnitude of this impact is still uncertain (as analysed already). The same arguments as for PP1 therefore apply here. An additional benefit will be the reduction in stress caused by inconsistent legal frameworks, since there will be a single uniform interpretation across the EU.

**Table 6-28: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Significant positive impacts due to significant reductions in fatigue/stress and reductions in periods away from home.
Measures that impact on fatigue and stress	Decreases in fatigue by up to 33%, plus improvements in issues related to insufficient rest, high strain and low autonomy.
Measures that have an impact on periods away from home	Positive impacts for most drivers. Small negative impact for coach drivers.
Measure (17b) – forbid performance-based pay	Uncertain. Reduction in variable pay for drivers that previously received performance-based pay, which may or may not be compensated by increases in fixed pay – affecting drivers in all MS. Greater certainty for drivers and lower incentives to break rules (as well as lower risk of fines). Lower stress due to more consistent legislative framework.
Overall impact of PP3	Strong positive impacts due to reductions in fatigue and periods away from home, although these are lower for affected coach drivers and - potentially – where drivers suffer from lower wages if they are not compensated for changes to performance-based payment rules.

### 6.1.5.4. PP4 - Revisions to PWD – horizontal policy option

The measures of PP4 are not expected to have significant impacts on fatigue and stress (see Section 6.1.2). In terms of periods away from home, PP4 may result in increases (see Section 6.1.1).

The main mechanism through which PP4 will affect working conditions is through changes to the wages and the applicable social rules for drivers that spend time exceeding the threshold for application of PWD in host countries that have high social standards. to **measure (18)**. Drivers that do not work internationally, or who are already paid above the minimum wage in host countries that they work in would not be affected. However, interviewed trade unions<sup>161</sup> were not supportive of the

<sup>161</sup> BE, NL, SL, IT

measures in terms of improving working conditions - believing that PWD should apply from day one.

The analysis of impacts on wages (see Section 6.1.6.4 on employment) shows that there is generally expected to be a neutral or negative impact for drivers engaged in international transport, particularly in EU13.

At the same time, **measure (19)** is expected to have impact by significantly reducing administrative costs for operators, which in turn will lead to an increase in transport activity (in comparison with the baseline). Thus, drivers involved in international transport operations (mainly from EU-13 countries) may benefit from increase in wages as they would most often be engaged in operations in Member States where wages (and other terms and condition of employment) are at higher level.

**Table 6-29: Summary of impacts from PP4**

Measure	Impact
Measures with impact on fatigue, stress and periods away from home (18) (19)	Small negative impact on fatigue and stress due to increase in periods away from home.
Measures with impact on wages (18) (19)	Uncertain. Measure (18) would have a neutral impact for EU-15 drivers and a negative one for most EU-13 drivers.  Measure (19) is likely to benefit EU-13 international drivers thanks to the increase in transport activities.
Overall impact of PP4	Small negative impacts overall due to increases in periods away from home and possible reductions in wages compared to the baseline for some EU-13 drivers operating in the countries that previously had minimum wage laws. Partly counterbalanced through positive impact on wages for some EU-13 drivers in international transport.

#### **6.1.6. Impacts on employment levels and types of work contract**

Depending on the policy package considered, employment levels may change as well as the type of work contracts. Most policy measures could have a direct or indirect impact on employment levels or types of work contracts. The analysis of impact has been analysed according the following logic:

- **Employment levels:** could arise from measures that directly affect, for example:
  - The *demand side* (i.e. number of drivers demanded by employers to carry out a given amount of transport). Measures that affect the demand could include measures that change the flexibility of scheduling drivers' activities, or measures that impact compliance levels (such as measures for improved enforcement), which could create a demand for more drivers to make up for the reduced amount of illegal overtime in the sector.
  - The *supply side* (i.e. the supply of drivers available for employment). Any measures that have an impact on the attractiveness of the profession of the driver, may help to increase employment levels in Member States with driver shortages. This is a second order impact resulting from changes in working conditions.
- **Type of employment contracts** could change as a result of those measures that change the differences in standards or rules between employees and self-employed drivers, which could lead to contracts shifting from one type to another. There are no identified policy measures that would have an impact on

the type of employment contracts, and hence our analysis focused focus on employment levels.

#### **6.1.6.1. PP1 – Clarification of the legal framework & improve cooperation**

The policy measures in PP1 that are expected to have the most relevant impact on the level of employment are as follows:

- (3) Allow for spending the regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.
- (4) Clarify that break, resting and driving time arrangements can be adapted (without changing the time limits) to address specific exceptional circumstances under which transport operations are carried out and/or to enable reaching home/base.
- (16) Define operations of occasional non-professional driver for private purposes and exclude them from the scope of the Regulation 561/2006.
- (17a) Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried).

**Measure (3)** which allows for spending regular weekly rest in the vehicle is likely to have minor impacts on both demand and supply sides of employment.

With regard to the *demand side* (i.e. number of drivers demanded by employers to carry out a given amount of transport), the option of allowing drivers to take the regular weekly rest in the vehicle is not expected to have any major impact on overall market demand, since the measure would only in practice affect drivers who are regularly operating in the affected countries (i.e. Belgium and France). The majority of transport undertakings interviewed (6<sup>162</sup> out of 7 interviewees) seem in favour of this measure, stating that measure (3) is a good proposal and that drivers should be allowed to spend regular weekly rest in the vehicle.

On the other hand, the *supply side* (i.e. the supply of drivers available for employment) is likely to indirectly benefit from this measure in terms of stress reduction and increased safety, which are expected to impact positively on overall working conditions (see analysis in Section 6.1.5) and thus the supply of drivers. However, the impact would be rather minor, since it would not affect all countries.

**Measure (4)** - allows for flexibility in arranging for taking breaks and/or rest periods in order to cope with unforeseen difficult traffic situations, weather conditions or other circumstances. For both demand and supply side, this measure would only have very limited impacts since it applies in only a small number of cases (due to the requirement that it be applied in limited circumstances). It is expected to have a small secondary positive impact on the level of *supply side* as it would improve overall working conditions by reducing stress and fatigue (see Section 6.1.5).

**Measure (17a)** allows Member States to forbid (on their territories) all performance based payment. With regard to the *demand side*, this measure is not expected to have major impact as considered voluntary and down to different MSs to adopt it. According to interviews with individual transport undertakings, the majority of respondents<sup>163</sup> is in favour with this measure, while at the same time stated that such payment method is currently not applied in their country. However, one individual undertaking from Czech Republic that adopts performance-based pay methods, commented that the measure would have a negative impact on employers which use it to motivate drivers and deliver transport operations in a more efficient way. Another respondent<sup>164</sup> also stated that performance-based pay should be further defined and clarified, as the methods does not necessarily lead to endangered road safety and increase in fatigue,

---

<sup>162</sup> Established in BG, HU, PL, SK, CZ, DE

<sup>163</sup> Specifically, 4 hauliers out of 7 (i.e. BG, HU, PL, SK).

<sup>164</sup> EU-wide transport undertaking

but could for example be used to monitor drivers speed and provide evidence to give drivers bonus if they respect speed limits.

This measure is expected to directly affect working conditions in a significant way, which would in turn affect the level of drivers *supply*. On the one hand, this measure is likely to have a positive impact on the level of supply as it could improve the working conditions relating to stress. On the other hand, measure (17a) has an uncertain impact on wages as haulier may or may not choose to compensate reductions in drivers' variable pay with increases in fixed wages. As analysed in section 6.1.5, the impact of this measure on wages is highly uncertain, but some reduction to the net monthly pay received by drivers should be expected in the case of operators affected by this measure, primarily in EU13.

Overall, given the voluntary nature of the measure, and the limited effect on both demand and supply side the actual impact on employment levels should be rather limited.

**Table 6-30: Summary of impacts from PP1**

Measure	Impact
(3) Allow for spending a regular weekly rest in the vehicle under certain conditions	Minor positive impact on the <i>supply side</i> due to the reduction of stress and increased safety (clearer rules, reduced stress from not having to look for adequate facilities).
(4) Clarify arrangements for breaks, resting and driving time under exceptional circumstances	Minor positive impact due to reduction of stress for drivers (clearer rules and higher possibilities to reach home base).
(17a) Forbid performance-based pay at MS level.	Uncertain impact on <i>supply side</i> (compensated wages and reduced stress and fatigue and improved safety). Minor impact on <i>demand side</i> .  Given the voluntary nature, the net impact (positive or negative) should be very limited.
Overall impact of PP1	Minor positive impact due to improved working conditions which have second order positive influence on the <i>supply side</i> .

#### **6.1.6.2. PP2 - Strengthening of enforcement and changes to obligations**

Measures included in PP2 that are expected to have significant impacts on levels of employment are:

- (1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks. The weekly rest period of less than 45 hours should not, however, be less than 24 hours and the reduction should be compensated by an equivalent period taken *en bloc* and attached to another weekly rest period.
- (2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'.
- (13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks.
- Voluntary and compulsory measures (i.e. (8), (9C), (11), (14C), (15C)), that helps improve compliance.

**Policy measure (1)** - on calculating average minimum regular weekly rest of 45 h – is expected to have a positive impact on both the *demand side* and *supply side* of the drivers' market and therefore lead to increases in level of employment.

With regard to the *demand side*, when representatives of individual transport undertakings were asked whether measure (1) would have an impact on the level of drivers needed, the weighted average response was an increase of 11%. More specifically, 44 out of 70<sup>165</sup> (42 of which were Hungarian respondents) said that such measure would result in an increase by more than 15% in number of drivers. Conversely, a lower proportion (9 out of 70, 5 of which were HU respondents) expect that measure (1) would increase the number of drivers needed by 5-15%. However, due to the over-representation of operators from Hungary<sup>166</sup>, results should be considered carefully: while on the one hand they seem to suggest that measure (1) could have a positive (increase) impact on the *demand side* (i.e. *weighted average response of 11% increase*), if the 42 coordinated responses from Hungarian operators are treated as one data point<sup>167</sup>, overall, an increase in number of drivers is still expected as a result of measure (1) but lower (i.e. 8% weighted average).

With regard to the *supply side*, measure (1) is likely to have a second order positive impact resulting from the improvements of overall working conditions. As previously analysed in section 6.1.2 and section 6.1.5 calculating average minimum regular weekly rest of 45 h over a period of 4 weeks appears to have a net positive impact on drivers' fatigue, therefore improve overall working conditions and result in potential increase in the *supply side* as a result of the improvement of working conditions.

**Measure (2)** lays down requirements for drivers to have access to adequate accommodation (provided/paid for by the employer). The overall impact of this measure on levels of employment is considered minor positive affecting both *demand* and *supply side*.

With regard to the *demand side*, the large majority (i.e. 46 out of 69 respondents) of transport undertakings responding to the data request that measure (2) would affect the number of drivers needed (weighted average response was an increase of 11%). A similar view was expressed by Hungarian and non-Hungarian respondents. Among the reasons given to justify the disagreement with the measure, both industry associations and transport undertakings commented on the lack of accommodations having secured parking facilities which would not allow the driver to secure the vehicle and the goods overnight<sup>168</sup>. The *supply side* is expected to rise due to the positive impact measure 2 will have on overall working conditions, as analysed in section 6.1.5.

**Policy measure (13)** - changes to the reference period for the calculation of the maximum average weekly working time (of 48h) to 4 weeks - is expected to increase both *demand* and *supply side*, which is likely to have a positive impact on employment.

From the *demand side*, a small rise in demand for drivers should be expected. Interviewed stakeholders<sup>169</sup> commented that the changes to the reference period will reduce their flexibility, particularly for those type of operations characterised by

---

<sup>165</sup> Results of survey of individual transport undertakings. The majority of responses were received by HU stakeholders, which submitted a group of 42 coordinated responses

<sup>166</sup> 58 out of 73 respondents to the hauliers' data request were received from Hungary. 42 of these were coordinated responses, while 16 were not

<sup>167</sup> 26 out of 42 respondents of the coordinated group stated that the number of drivers would increase by more than 15%; 2 out of 42 stated responded that the number of drivers would increase by more than 5-15%

<sup>168</sup> As per results of interviews

<sup>169</sup> i.e. transport undertakings from HU, PL, SK and CZ

significant seasonal fluctuations. In turn, this is expected to increase the number of drivers needed to respond to the change in activity caused by measure (13)<sup>170</sup>.

With regard to the influence on the *supply side*, measure (13) is likely to have a net positive impact on levels of fatigue, road safety, and overall working conditions as it is analysed in section 6.1.5).

In addition, measures that **help to improve compliance** with the social legislation (see Section 6.1.1), are also expected to have second-order positive impact on the *supply side* (i.e. attractiveness of the sector is improved), and a minor positive impact (increase) on the level of *demand side*, as more drivers might be needed as result of reduced illegal practices.

**Table 6-31: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Minor positive impact due to improved working conditions which have second order positive influence on the <i>supply side</i> .
(1) Calculating average minimum regular weekly rest of 45 h and on adequate accommodation	Positive minor impact resulting from an increase in both demand and supply side due to change in transport operations and improved working conditions.
(2) Forbid spending the regular weekly rest of over 45 hrs in the vehicle and oblige employer to either provide or pay for adequate accommodation	Minor positive due to the increase in both demand and supply side due to possible decrease in flexibility of transport operations and improved working conditions for drivers.
(13) Changes to the calculation of working time	Overall, major positive impact on levels of employment due to the positive net improvement of overall working conditions and minor increase in demand side.
All measures of PP2 that have an impact on compliance	Minor positive impact on both <i>supply</i> and <i>demand</i> side, which is expected to increase overall levels of employment to a limited extent.
Overall impact of PP2	Overall positive impact on levels of employment due to expected major increases in supply side, and slightly minor increase in demand side.

### 6.1.6.3. PP3 - Targeted revisions of the social legislation

In terms of the qualitative impacts on level of employment, PP3 will have the same impacts as for PP2, since it contains **measures (1), (5) and (13)**.

In addition, other possible measures that may have an impact on fatigue are:

- (6) Adapt '12-day rule' in international occasional passenger transport by coach
- (7) Allow for flexibility for domestic occasional transport of passengers by coach:
  - (7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.
  - (7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.
- (17b) Forbid all performance based payment (based on distances travelled / amount of goods carried)

<sup>170</sup> Results of interviews with individual transport undertakings

**Measure (6)** would essentially lead to the removal of the additional compensation time required at the end of the 12-day derogation. Thus, in the longer term, the measure would provide additional flexibility to international passenger transport operations. As a result, this is expected to have an impact on the *demand side*, as less drivers might be needed.

According to the analysis provided in the literature (SDG, 2009), specifically in regard of the impact of measure (6), it is suggested that the derogation would eliminate the need for a second driver travelling out to join a 12-day or more coach tour. Results from interviews with industry associations (6 out of 14 respondents<sup>171</sup>), agreed on the act that measure (6) would provide adequate flexibility to passengers transport operations (international or domestic).

However, the magnitude of such impact is considered uncertain. The challenge of assessing a clear impact of the measure is mostly due to the lack of relevant evidence. According to the results of interviews, the large majority (6 out of 7 of respondents) of individual transport undertakings do not deal with passengers transport operations, therefore did not have a clear opinion. Similarly, during interviews with industry associations, half of respondents did not have an opinion on the matter (i.e. 7 out of 14 respondents). The results of the operators' data request also did not provide a relevant amount of data. Only 5 respondents out of 58 responded to the question on the increase of flexibility by measures (6). Interestingly, the majority think that measure (6) would have no impact on flexibility.

In summary, measure (6) is very likely to have an impact on flexibility of operations, affecting the demand of drivers, however, due to the lack of relevant data, the magnitude of the impact is uncertain.

With regard to the *supply side*, measure (6) could lead in a possible increase in fatigue as it effectively reduces drivers' rest by 21 hours and requires longer periods spent away from home. The analysis of measure (6) on fatigue, periods away from home and overall working conditions is analysed in details in sections 6.1.1, 6.1.2 6.1.5.

**Measure (7a or 7b)** allows for further flexibility to the domestic occasional transport of passengers by coach by applying a 12-day and 8-days derogation.

With regard to the *demand side*, both measures (7a) and (7b) are expected to have a negative (decrease) impact on the number of drivers needed. According to the analysis provided in the literature (the study refers to international passengers transport, but analyses the impact of the 12-day derogation (SDG, 2009)), it is suggested that the 12-day derogation (i.e. measure 7a) would eliminate the need for a second driver travelling out to join a 12-day or more coach tour, when this happens for domestic transport. Therefore, measure (7a) could reduce the demand for drivers. Measure (7b) applying an 8-day derogation is expected to have a less great impact on demand side than (7a).

With regard to the *supply side*, as previously analysed in section 6.1.2 measures (7a, 7b) could lead to a possible increases in fatigue, in part due to longer periods away from home, counterbalanced to some extent by improved flexibility to cope with passenger demands.

Therefore, overall, measures (7a and 7b) are expected to have a negative impact (decrease) on both *demand* and *supply side*, leading to possible decrease in levels of employment.

Similarly to the analysis in PP1, **measure (17b)** is likely to have an uncertain impact on *supply side* (compensated wages and reduced stress and fatigue and improved safety), and a negative impact on *demand side* as it would be applied to all MS. However, the magnitude of the impact on the *demand side* is also uncertain. As explained in PP1, the majority of individual undertakings (i.e. 6 out of 7 respondents

---

<sup>171</sup> BG, ES, PL, AT and two EU-wide associations

taking part in interviews) stated that performance based-pay is not applied in their country and only one stakeholder commented that it would be problematic.

**Table 6-32: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Overall positive impact on levels of employment due to expected major increases in supply side, and slightly minor increase in demand side.
(6) Adapt '12-day rule' in international occasional passenger transport by coach	Possible minor negative impact on levels of employment due to decrease in demand and worsening of working conditions and road safety.
(7) Allow for flexibility for domestic occasional transport of passengers	Possible minor negative impact on levels of employment due to the decrease in both demand and supply side.
(17b) forbid performance-based pay.	Uncertain impact on <i>supply side</i> (compensated wages and reduced stress and fatigue and improved safety). Negative impact on <i>demand side</i> , although of uncertain magnitude.
Overall impact of PP3	Positive impact from measures of PP2 partly counterbalanced by negative impacts for coach drivers affected by the measures.

#### **6.1.6.4. PP4 - Revisions to PWD – horizontal policy option**

The measure of PP4 which is expected to have the most relevant impact is:

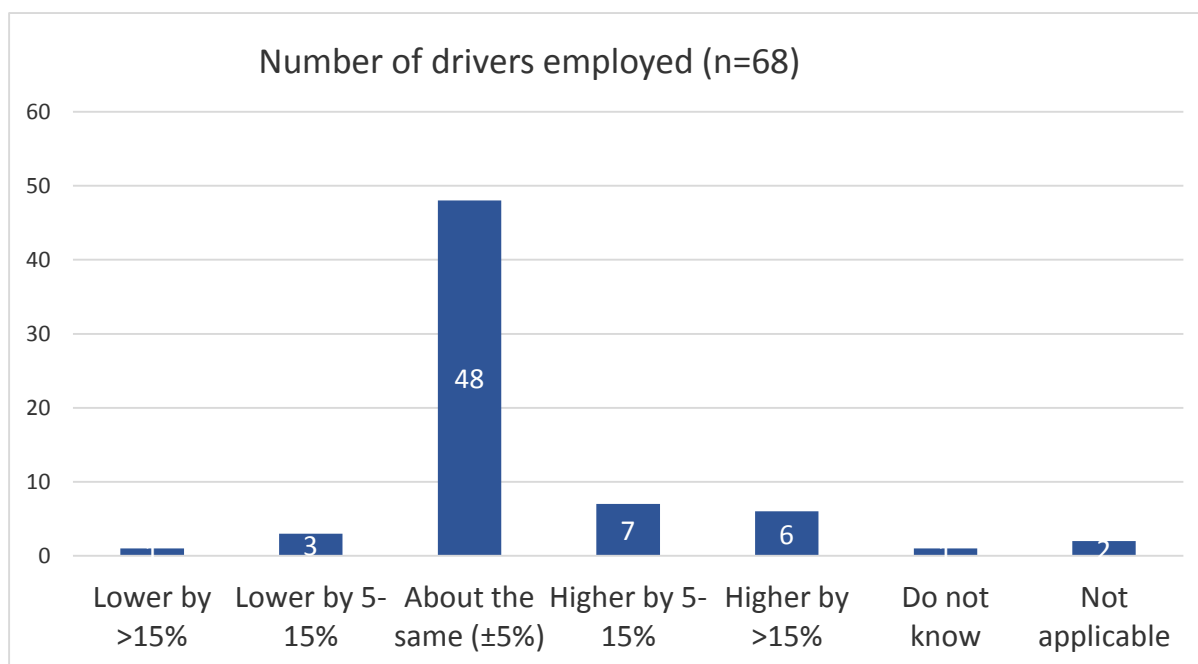
- (18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD.

With regard to the *demand side of the drivers' market*, **measure (18)** is not expected to impact on the overall (EU-level) of demand for transport operations – and thus for drivers - since customers would still require their goods to be carried, and this level of demand is driven by GDP activity. Rather, the measure would affect the distribution of employment between drivers that were previously posted versus domestic drivers. The latter should be expected to take up any trips that are no longer carried out by posted workers once any cost advantage of using posted workers disappears.

In line with this, results from the operators' data requests confirm this argument. Although these results should be treated carefully<sup>172</sup>, the large majority of operators stated that they do not expect measure (18) to impact on the number of drivers needed (see Figure 6-15). However, when the Hungarian respondents were removed, 8 out of 12 non-Hungarian respondents felt that the number of drivers employed would increase.

<sup>172</sup> 69% of responses were submitted by HU drivers

**Figure 6-15 Transport operators' expectation on how measure (18) would impact on the numbers of drivers needed**



Source: Transport operators' survey

With regard to the impact on the *supply side*, Measure (18) is highly relevant because is expected to have significant impact on periods away from home (see Section 6.1.1) and on overall working conditions (see Section 6.1.5). Both these impacts are also expected to have a positive impact (increase) on the level of supply, therefore a potential change in the levels of employment.

At the same time, measure (18) is likely to have an impact on drivers' salaries. Table 6-33 below maps out four different scenarios in which impact on drivers' salaries are expected to different extents (i.e. depending on the duration and destination of international transport operations).

**Table 6-33 Expected impact of measure (18) on drivers' salary**

Posting country	Hosting country	
	Countries with minimum wage laws in the baseline	Other countries where no minimum wages currently apply in the baseline
<b>EU-15</b>	<b>(A)</b> Only minor differences in salaries are expected	<b>(B)</b> No impact as drivers are typically already paid at least the minimum wage
<b>EU-13</b>	<b>(C)</b> Average salary will probably decrease for those drivers who take part in international transport operations <b>below</b> the 5, 7 or 9 days period compared to the current minimum wage rules in 8 MS, which apply from day 1.	<b>(D)</b> Salaries may increase for those drivers taking part in international transport operations of which duration is <b>above</b> 5, 7, or 9 days period, after which minimum wage of a host country would apply.

With regards to scenario **(A) and (B)**, no impacts on salaries are expected to affect drivers posted by EU-15 countries, since they are already paid at least the minimum wage in all potential host countries.

Scenario **(C)** is based on the analysis of change in compliance and administrative costs for operator in case measure (18) is applied (see Section 6.2.1 which analyses specifically the changes in compliance costs – i.e. wages paid to drivers due to the measures). The results suggests that the compliance costs reduce for all three thresholds for all EU-13 Member States. The reductions range from 58% in Czech Republic and Slovakia to 83% in Spain for the 5 day threshold. For the 7 and 9 day threshold the reductions are, as expected, even higher with up to 92% in Slovakia. This shows that even though the minimum wage laws have to be applicable in all EU28 Member States, this may result in a decrease in salaries for drivers for those who take part in international transport operations **below** the 5, 7 or 9 days period. The reason is that the majority of trips are carried out to the countries that previously had minimum wage laws in the baseline (and hence applied minimum wages from day 1), and that most trips fall below 5 days in length according to estimates from DTU.

In the case of drivers posted in Member States without minimum wage rules in place (Scenario **D**), a positive impact on wages may be expected - although likely to benefit drivers from EU-13 countries only - and only when transport operations are longer than the three time thresholds suggested in measure (18).

Overall, the impact of measure (18) on the *supply side* is considered to be negative (decrease) for a greater number of drivers from EU-13 as per the scenarios described above.

**Measure (19)** – the introduction of a sector-specific administrative requirements and a two-step enforcement process– should also be expected to have a second-order positive effect on levels of employment. Due to the decrease in administrative cost (see Section 6.2.1), operators are expected to increase international transport operations, which would in turn have an impact on the level of demand for drivers with a positive impact on drivers wages. This should, in turn, improve the job attractiveness which can have – in the long term - a positive impact on the level of supply and, eventually, on employment levels.

**Table 6-34: Summary of impacts from PP4**

Measure	Impact
(18) Set time-thresholds (measured as the number of days and nights spent in a host Member State over a month). Variant a – 5 days, variant b – 7 days and variant c – 9 days.	Potential decrease in levels of employment due to decrease in <i>supply side</i> arising from lower wages. No major impact on <i>demand side</i> .
(19) Tailored two-steps enforcement process.	Possible positive impact on both <i>demand</i> and <i>supply side</i> due to the increase in international transport operations.
Overall impact of PP4	Overall, uncertain impact due to diverging type of impacts on both <i>demand</i> and <i>supply side</i> .

#### **6.1.7. Impacts on the principle of non-discrimination, equal treatment and equal opportunities**

The road social legislation is relevant to the implementation of the fundamental rights set out in the Charter of Fundamental Rights of the European Union. Specifically, Article 31 of Title IV of the Charter establishes the right to fair and just working conditions. This article grants rights to workers to daily and weekly rest periods, as well as a limitation to the maximum working hours.

The equal implementation and respect of the road social legislation is therefore important to ensuring the fundamental rights of drivers. The inconsistent enforcement of existing social rules, as well as rules concerning positing of workers that is currently

observed among Member States (see the problem definition, Annex A) can lead to unequal treatment.

Therefore, impacts on the principle of non-discrimination, equal treatment and equal opportunities from the measures are expected in relation to the following:

- *Clarity and consistency of the legal framework*: this will help to ensure more consistent interpretation and enforcement of the rules, which will in turn help to ensure more equal treatment of drivers across all Member States.
- *Effectiveness of enforcement of the social legislation*: is expected to have a positive impact in terms of more consistent enforcement. In addition, it will help to improve compliance, and as a result ensure better and more equal standards of social and working conditions for drivers across all Member States.

#### **6.1.7.1. PP1 – Clarification of the legal framework & improve cooperation**

Overall, all measures included in **policy package 1** are expected to contribute, to some extent, to the reduction of discrimination and unequal treatments as they all aim to improve the clarity of the social legislation rules. As described in section 6.1.1, measures intended to improve clarity of existing social rules are expected, in the long term, to reduce the level of unintentional non-compliance. However, according to the analysis of compliance (see Section 6.1.1), PP1 is only expected to have a very limited positive impact due to the increased clarity and improved enforcement. As a result this is likely to have only a minor positive impact on reducing discrimination and unequal treatment of drivers.

Specific measures within PP1 are expected to be more relevant than others in this regard:

- **Measures on improving cooperation between Member States (i.e. (10), (9V), (14V), (15V))** are overall expected to have a minor positive impact on effectiveness and improved consistency of enforcement due to their voluntary nature, with exception of **Measure (10)**. The latter is also not likely to have major impact on levels of compliance due to the high costs of implementation (see Section 6.1.1.1). Consequently, these measures are not expected to have a significant impact on the principle of equal treatment of drivers across different Member states.
- **Measures (3), (4), (12), (16) on improving the clarity of the current road social legislation**. As analysed in section 6.1.1.1, these measures are expected to have only a limited positive impact on improving the clarity, and therefore the unintentional non-compliance, in the long term. Therefore, are not expected to address the problem of unequal and inconsistent enforcement of existing regulations.
- **Measure (17a)** - Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried) – is expected to have a minor negative impact, as it could potentially lead to even greater divergence in the legal framework across EU, leading to further uncertainties, and ultimately to increased inequality of drivers' treatment and opportunities.

**Table 6-35: Summary of impacts from PP1**

Measure	Impact
Measures on improving cooperation between Member States (i.e. (10), (9V), (14V), (15V))	Limited positive impact on equal treatment and non-discrimination of drivers across different MS due to the voluntary nature of most measures.
Measures on improving the clarity of the current road	Limited positive impact on equal and consistent enforcement

Measure	Impact
social legislation (i.e. (3), (4), (12), (16))	of existing regulations.
Measure (17a)	Limited negative impact on equal treatment and opportunities for drivers' across different MS due to the increased legal uncertainty.
Overall impact of PP1	Insignificant contribution to ensuring equal treatment at the EU level. This will be proportional to Member States voluntarily applying EU recommended uniform schemes for enforcement.

#### 6.1.7.2. PP2 - Strengthening of enforcement and changes to obligations

Overall, **policy package 2** is expected to have significant positive impact on reducing and preventing discriminatory enforcement practices across different Member States. In this regard, the most relevant policy measures are those expected to improve the *effectiveness of enforcement*, while promoting a coordinated enforcement approach across different Member States. As a result, the level of compliance of social rules also increases, which consequently improves overall drivers working and social conditions.

Overall, measures **(8), (11), (9C), (14C), (15C)** on making enforcement controls more effective and coherent across different Member States - are expected to have major positive impact on this regard.

Specifically, **measure (8)** – on allowing controllers to access risk-rating systems in real-time of control – and **measure (9C)** - Establish recommended EU uniform formula for calculating risk rating of non-compliant operators are expected to reduce inequalities between operators from different Member States, which would otherwise apply different methods of establishing the company's risk score. Furthermore they would promote more effective enforcement practices, regardless the location (e.g. different Member States) in which they are taking place.

Similarly, both **measures (14C) and (15C)** are expected to significantly improve the effectiveness of enforcement practice by introducing a compulsory time threshold by which compliance with Directive 2006/22 has to be checked, and by establishing a reporting template to improve consistency and coherence of biennial reporting of compliance with both WTD and Regulation 561/2006. As a result this is expected to have a positive impact on current discriminatory enforcement practices across different Member States.

Another important measure is **(11)** -to abolish attestation forms on top or instead of tachograph records and define how 'other' work is best controlled. This is expected to have a positive impact as it would eliminate the confusion concerning the requirement for submitting attestation forms and ensure a common approach across all Member States. Currently, different national requirements over whether or not attestation forms are required causes unequal and inconsistent enforcement across different Members States, and ultimately an unequal treatment of drivers.

In addition, **measure (1)** – on calculating average weekly working time – is expected to have a minor positive impact on compliance as a result of improved enforcement and increased flexibility (see Section 6.1.1.2). This is likely to level out opportunities for drivers, who would be better protected by clearer working time limits.

**Table 6-36: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Insignificant impact to ensuring equal treatment at the EU level.
(1) Calculating the required regular weekly rest period of	Minor positive impact on drivers' equal opportunities thanks to

Measure	Impact
45 hours as a minimum average resting time over a reference period of rolling 4 weeks	clearer working time rules.
Measures on making risk-rating system more effective (i.e. (8) and (9C))	Positive impact on reducing inequalities between national operators as well as promoting effective and coherent enforcement practices.
(11) Abolish attestation forms on top or instead of tachograph records and define how 'other' work is best controlled	Positive impact on unequal and inconsistent enforcement practices across different Member States.
Measures on improving the effectiveness of enforcement practices (i.e. (14C), (15C))	Positive impact on improving discriminatory enforcement practices across different Member States.
Overall impact of PP2	Positive impact in terms of improving the consistency of enforcement, abolishing inconsistently applied attestation forms and minor positive effects on compliance.

#### 6.1.7.3. PP3 - Targeted revisions of the social legislation

**Measures (7a and 7b)** of PP3 are expected to have a positive impact on the principle of non-discrimination, equal treatment and opportunities by ensuring equal treatment between drivers engaged in international passenger transport by coach and those engaged in similar domestic tours.

With regard to **measure (17b)** – on forbidding all performance based payment – the compulsory implementation of a clearer rule on drivers' payment schemes across all Member States would secure a more equal treatment in terms of the legal forms of payment allowed. However, it is difficult to say whether or not this would in turn create differences in drivers' pay across different Member States depending on how the road transport market may respond.

**Table 6-37: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Positive impact in terms of improving the consistency of enforcement, abolishing inconsistently applied attestation forms and minor positive effects on compliance.
Measures on extending derogations to the domestic occasional passengers transport sector (7a and 7b)	Positive impact on ensuring equal opportunities between operators and drivers carrying out passengers transport activities (i.e. international and domestic).
(17b) Forbidding all performance based payment (based on distances travelled / amount of goods carried)	Minor positive impact on improving equal treatment of drivers regarding payment schemes across all Member States. However, uncertain impact on the extent to which this would, in the long term, create differences in drivers' salaries in different MS.
Overall impact of PP3	In addition to PP2, overall positive impact on equal treatment of international and domestic coach drivers, as well as reducing inconsistencies in payment schemes.

#### 6.1.7.4. PP4 - Revisions to PWD – horizontal policy option

Overall, **policy package 4** is likely to have a positive impact on the principle of non-discrimination and on equal treatment and opportunities.

Specifically, the introduction of a proportionate and common approach to the application of the posting provisions in road transport (i.e. **measure (18)**) is expected to reduce the inequalities between non-domestic and domestic drivers. Moreover, the measure would secure equal treatment and opportunities for operators, who, as a result, would benefit from a fairer competition with operators based in low-cost countries and operating in high-cost 'host' country.

However, it is uncertain whether such measure would create equal opportunities for drivers who are employed by the same operator, but carry out international operations on different routes (i.e. via different countries). Potentially this would mean that some drivers could be involved in work in high-cost countries and others in low-cost countries, which is likely to cause significant difference in drivers' pay employed by the same company. According to the polish undertaking association, the difference could potentially be more than double<sup>173</sup> (TLP, 2016).

Moreover, as analysed in section 6.1.1.4, the overall impact of policy package 4 on compliance is considered uncertain due to the unclear impact of both **measures (19) and (20)** on the effectiveness of enforcement of the revised posting of workers rules. Therefore, it is uncertain whether both measures would have a positive or negative impact on a more consistent and non-discriminatory enforcement practices across different Member States, securing equal treatment and opportunities for drivers and operators.

**Table 6-38: Summary of impacts from PP4**

Measure	Impact
18 - Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD.	Positive impact in terms of reducing the inequalities between foreign and local drivers working on the territory of the same country. However there is a risk of creating unequal conditions between drivers employed by the same operator but driving different routes.
Measures on enforcing the application of PWD provisions (i.e. (19), (20))	Uncertain due to unclear effectiveness which may lead to unequal treatment of enforcement in different Member States.
Overall impact of PP4	Potentially positive impact due to the introduction of clearer and more proportionate posting of workers provisions, although uncertain the extent to which it would equally benefit drivers across different Member States and within the same company.

## 6.2. Economic impacts

### 6.2.1. Impacts on businesses (operational, compliance and administrative costs)

In this section we examine the additional costs or savings arising for transport operators that are affected by the proposed measures. Changes to the costs (or savings) may arise as a result of the changes to actions needed to ensure compliance with the new provisions or may be linked to administrative actions (information collection, reporting) linked to the proposed measures.

<sup>173</sup> Calculations made on the basis of hypothetical scenarios where two different drivers working for the same employer carrying out international transport operations on different routes and across different countries with different minimum pay regulations.

Furthermore, the costs/savings arising may be one-off or ongoing:

- **One-off cost impacts** could arise from measures that may involve one-off investment costs in new equipment. For example, changes to IT software needed could involve an upfront cost. New software may be required, for example, in order to cope with changes to the driving or working time rules, or to comply with calculation methods introduced by sector-specific PWD rules.
- **Ongoing cost impacts** could arise from measures that involve changes to specific actions or compliance behaviours, for example possible need for employers to pay for accommodation for drivers, or the need to monitor/report the time that drivers spend in another Member State in a different way to that currently taken. Changes to the working and rest time rules may also affect operational schedules and therefore resources (personnel and/or vehicles) while changes to posting provisions are also expected to lead to cost savings compared to the baseline, due to reductions in administrative effort. Furthermore, there are possible impacts on non-compliance costs, namely the costs of penalties imposed by authorities in the case of infringements of specific provisions.

We have sought to develop quantitative estimates of the aggregate costs or savings for business for the measures with the more important impact combined with qualitative insight into the factors driving any cost changes from interviews with hauliers and the study visits.

The analysis is based on input from the data request form sent to transport operators together with input from the interviews with individual hauliers and the industry representatives.

#### **6.2.1.1. PP1 – Clarification of the legal framework & improve cooperation**

Measures under policy package 1 that are generally not expected to have a significant impact on businesses. The most relevant measures with a potential impact include:

- (3) Allow for spending a regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.
- (17a) Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried).

Other measures aiming to improve enforcement (9V, 10, 15V) under policy package 1 are not expected to have an impact on businesses' costs. Similarly, the provisions to exclude occasional drivers performing operations for private purposes from the scope of the Regulation 561/2006 (measure 16) is not expected to have any impact on businesses since their operations will remain within the scope of the Regulation.

In relation to **Measure (3)** (allow spending a regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances), some operators may experience lower direct costs for providing or paying for accommodation. Currently, spending regular weekly rest is prohibited in the majority of Member States, but actively enforced only in France and Belgium (Ricardo et al, 2016). As such, the impact of this measure should mainly affect trips that take place in these two Member States. Bulgarian and Polish hauliers' representatives and the European Express Association indicate that drivers often have to drive additional distances to find adequate accommodation. Individual hauliers from Bulgaria, Hungary and Slovakia indicated that drivers prefer to spend time in the vehicle, risking possible fines. UETR and the Czech industry representatives reported that drivers often prefer to run empty to leave France and Belgium, risking non-compliance with driving or rest time rules. The proposed measure will remove these indirect costs, as well as direct costs of providing accommodation. Still, given that the measure is only affecting operation in two Member States, the cost savings arising in comparison to the baseline are expected to be limited.

**Measure (14V)** - setting a minimum threshold for controls of working time provisions on a voluntary basis - may have an impact to operators by increasing the number and

duration of checks. However, given the voluntary nature of the measure and the fact that many authorities expect significant problems for the implementation of the specific measure (as discussed already in Section 6.1.1), uptake is likely to be low. As a result, the overall impact of the measure will be very limited.

In relation to **Measure (17a)** (allow Member States to forbid on their territories all performance based payment), some operators may need to make changes to existing payroll systems. The impact will mainly arise for EU-13 based operators, where according to the drivers' survey presented in Ricardo et al. (2016) 50-77% of drivers are paid on the base of performance-based schemes with the variable portion of salary being on average 57%. On the other hand, most interviewees representing hauliers in the EU-13 (including individual hauliers and/or relevant associations in Bulgaria, Hungary, Poland, Czech Republic and Romania) claimed that performance-based payments are not used. The same was indicated by industry representatives in the EU-15 (Austria, France and Denmark). Thus, none of them expected a significant cost from the adoption of such measure in terms of their payment systems. This seems to contradict the findings of the drivers' survey referred to above. Still, the voluntary nature of the measure means that uptake may vary across Member States. Even if it applies, operators will not need to incur additional costs, unless they decide to fully compensate drivers for the loss of any variable payment components (see also impact on wages in 6.1.6.1). While a specific estimate cannot be made, we do not expect the specific measure to introduce additional costs for the majority of operators.

Finally, in relation to the possible impact on costs of non-compliance for business, the analysis in Section 6.1.1.1 suggests that there will not be any measurable impacts on compliance levels. As a result, no impacts on non-compliance costs should be expected.

**Table 6-39: Summary of impacts from PP1**

Measure	Impact
(3) Allow for spending a regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances.	Limited cost savings, mainly for operators currently affected by the ban in Belgium and Poland.
(14V) Setting a minimum threshold for controls of working time provisions on a voluntary basis	Very limited impact due to expected low level of adoption by Member States.
(17a) Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried);	Do not expect the specific measure to introduce additional costs for the majority of operators either because they do not use performance based payment or because Member States will not chose to adopt it.
All PP1 measures that have an impact on compliance	No impact on non-compliance costs.
Overall impact of PP1	Net impact (negative or positive) expected to be very limited.

#### **6.2.1.2. PP2 - Strengthening of enforcement and changes to obligations**

In addition to any impacts under policy package 1, **policy package 2** will have an additional impact on business as a result of the following measures:

- (1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks.
- (2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'.

- (5) For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged.
- (11) Abolish attestation forms on top or instead of tachograph records and define how 'other' work is best controlled.
- (13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks.
- (14C) Extend checks at the roadside and at premises also to compliance with working time establishing a mandatory minimum threshold for controlling compliance under Directive 2006/22.

Other measures aiming to improve enforcement (8, 9C, 15C) under policy package 2 are not expected to have an impact on businesses' costs.

In the case of **measure (1)**, operators may incur small one-off costs if they need to update their driver scheduling software to ensure compliance with the new provisions (indicated by 21 out of 73 (28%) of respondents to the survey of hauliers). Furthermore, there will be some upfront costs to re-train drivers regarding new rules, as highlighted by 64 out of 73 (87%) respondents<sup>174</sup>. Among industry representatives<sup>175</sup>, certain costs for software updates/changes were also expected although no specific estimates were provided and some<sup>176</sup> considered that the additional costs will not be significant for most operators.

While a direct quantification of the relevant costs has not been possible, according to (Ricardo et al, 2016) the one-off costs for operators as a result of the introduction of Regulation 561/2006 to purchase software to read the tachographs was €558 million (€600 per unit for 930,000 operators affected). As indicated above, in the case of measure (1), the expected costs of the updates are expected to be smaller and affect a smaller number of operators. Training costs should also be significantly less than the estimated annual cost of €126 million<sup>177</sup> affected by Regulation 561/2009 that was estimated by Ricardo (2016)). When asked to indicate the expected overall impact on operating costs from the proposed changes compared to the current costs, the great majority of respondents indicated that they expect a significant increase (see Figure 6-16). The weighted average<sup>178</sup> increase in operating costs was estimated to be 12% (13% for Hungarian firms, 12% for EU-13 and 8% for EU-15).

---

<sup>174</sup> The ratio is largely similar across EU13 groups (54 out of 58 operators from Hungary, 62 out of 67 from all EU13) but only 2 out of 6 from EU-15

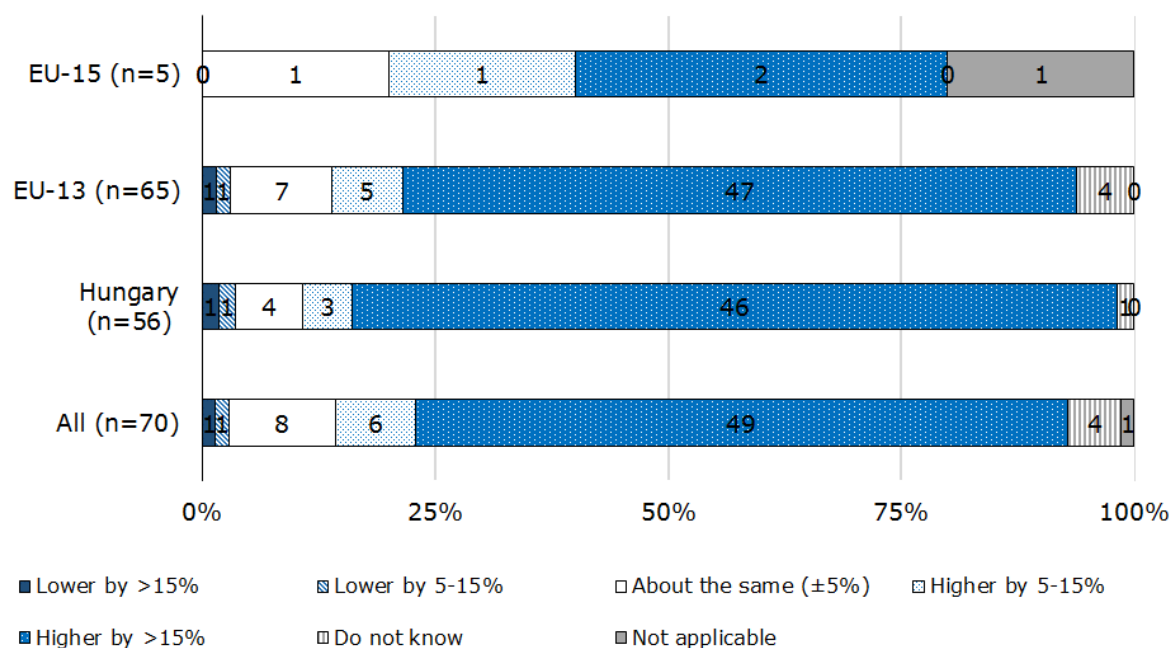
<sup>175</sup> AT, BG, CZ, DE, ES, PL, RO, DK

<sup>176</sup> DE, PL, RO

<sup>177</sup> €350/driver for the 3.6 million drivers with 10% of them trained annually

<sup>178</sup> Based on the following weights: -0.15 for lower than 15%, -0.1 for lower by 5-15%, and 0 for about the same and not applicable, +0.1 for higher by 5-15% and +0.15 for higher than 15%.

**Figure 6-16: What will be the impact on annual operating costs for your organisation as a result of the proposed measure (compared to current costs)?**



Source: Transport operators' data request

On the other hand, the proposed changes to the reference period should increase flexibility of operations. This may allow operators to transfer some of the regular weekly rest time at the end of the 4 week reference period and better fit the drivers schedule to the level of demand, while making the calculation of the average weekly rest easier. This point was recognised by individual hauliers interviewed<sup>179</sup>, as well as most of the industry representatives<sup>180</sup>.

Asked to assess the balance of costs and benefits, most industry representatives<sup>181</sup> and individual operators from Germany, Czech Republic and Poland considered that the benefits will outweigh the costs. Only two interviewees (UEAPME and the Bulgarian association) suggested that costs will be higher due to significant reorganisation costs. While it has not been possible to develop a quantitative estimate of the costs for the whole industry, it appears that the longer term benefits from increased flexibility should outweigh any short term costs for most operators. Thus, the measure should be expected to bring some savings to operators.

In the case of **Measure (2)** - which forbids spending the weekly rest in the vehicles – an increase in operating costs should be expected for operators that need to ensure that drivers will have access to appropriate accommodation. On the basis of the drivers survey, 85 out of 265 (32%) spend some of the regular weekly rest time on board the vehicle<sup>182</sup>. Although only 24 (9%) indicated that they spend more than 50% of their rest time on board the vehicle, the majority of respondents were from EU-15 countries that are not typically thought to have problems with long periods away from home. Looking specifically at responses from the 21 EU-13 drivers suggests that they tend to spend more time on board the vehicle than their EU-15

<sup>179</sup> HU, PL, DE

<sup>180</sup> AT, CZ, BG, ES, PL, DK, Nordic logistics

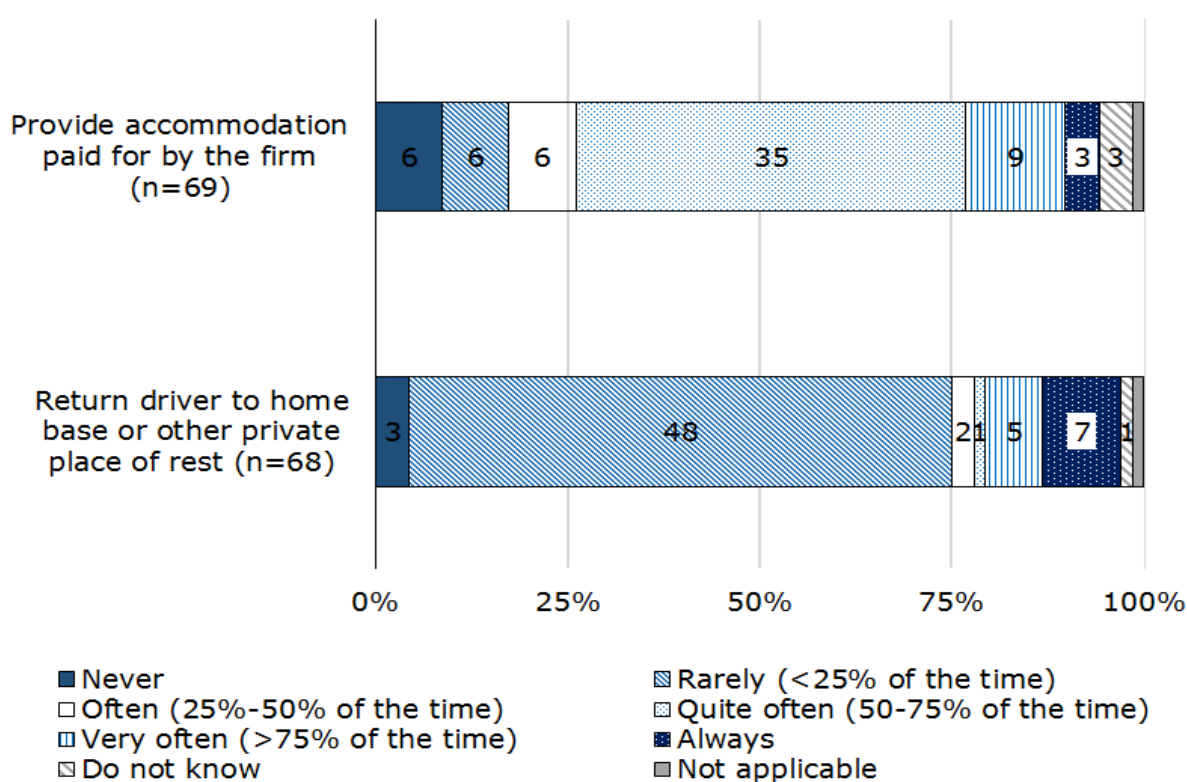
<sup>181</sup> AT, DK, RO, PL, CZ

<sup>182</sup> Drivers that did not indicate that they never spend time in the vehicle.

counterparts<sup>183</sup>. This is also supported by a (separately conducted) roadside survey among 1,800 drivers in Germany, where it was found that 43% of EU-12<sup>184</sup> compared with 11 % of EU-15 drivers spend their weekly rest period in/by their vehicle (BAG, 2014 cited in Broughton et al. (2015)).

Operators may be able to minimise additional costs by scheduling drivers to be at home during weekly rest periods. However, the responses to the operators' data requests suggests that this may not be a common choice. The majority (48 out of 68 respondents, 70.5%) indicated that they would only do this rarely (see Figure 6-17). In contrast, 47 out of 69 respondents (69%) indicating that they will give preference to paying for accommodation. A note of caution is needed given the very high share respondents from Hungary. Among other EU-13 or EU-15 operators, the responses were evenly split in relation to the preferred resting place<sup>185</sup>.

**Figure 6-17: In the case that spending the regular weekly rest periods of more than 45 h in the vehicle is forbidden, which resting places do you**



**expect to give preference to?**

Source: Transport operators' data request

Estimates of the costs per night provided by some interviewees suggest that current costs for accommodation are typically in the range of €25-80/driver/night. Hauliers from Bulgaria and Hungary added costs for parking (although these should typically apply even if they spend time in the vehicle) and also the costs for possible detours and empty runs in order to find adequate accommodation.

<sup>183</sup> 33% of EU13 drivers (7 out of 21) indicated that they spend more than 50% of the times the regular weekly on board in comparison to 7% (17 out of 243).

<sup>184</sup> Not including Croatia

<sup>185</sup> 3 out of 9 EU-13 hauliers indicated that they would prefer to return the driver home more than 50% of the times in comparison to 5 out of 9 that indicated that they would provide accommodation more than 50% of the times. 2 out of 5 EU-15 hauliers indicated that they would prefer to return the driver home more than 50% of the times in comparison to 1 out of 9 that indicated that they would provide accommodation more than 50% of the times.

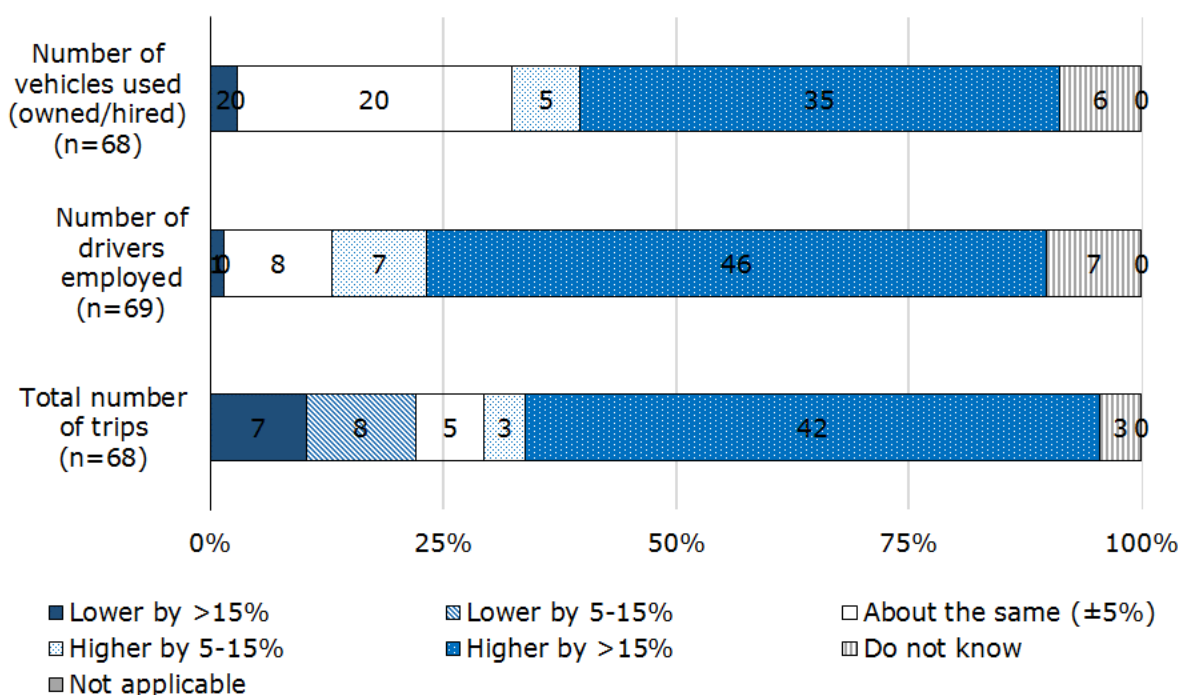
Having said that, the extent that operators will actually incur additional costs is not clear. Besides the fact that many operators already pay for accommodation, in some Member States accommodation allowances are already mandatory as part of the collective agreements (e.g. Spain). In such cases, there will not be additional costs for covering accommodation costs from the proposed measure.

UETR also made reference to costs for proving where drivers spent their rest time, which they estimated to be €5 per trip. However, this cost estimate appears excessive if a bill/receipt from the place of rest (motel/hotel) is sufficient or if the approach used in Belgium is adopted - where the burden of proof is on the authorities.

The responses of operators also suggest that the measure will have a broader impact on operations, with most of them expecting a significant increase in the number of vehicles used, drivers employed and total number of trips (see

Figure 6-18). The fewer responses from the subgroups (EU-13 excluding Hungary: 8, and EU-15: 5) do not indicate an increase in the number of trips<sup>186</sup> but are similar in the case of number of vehicles used or drivers employed<sup>187</sup>.

**Figure 6-18: Would the proposed measure have an impact on any of the parameters indicated below?**



Source: Transport operators' data request

Along similar lines, industry representatives from Czech Republic and Bulgaria and EEA pointed to possible impacts on distribution patterns and the need for additional drivers which may make it more complicated and costly to organise travel.

When asked to balance costs against benefits, interviewed industry representatives<sup>188</sup> representing both EU-13 and EU-15 countries considered that the costs will clearly outweigh any possible benefits for businesses.

Overall, additional costs should be expected to arise for an important share of operators that currently have drivers that spend their regular weekly rest in vehicles,

<sup>186</sup> 5 out of 8 EU-13 referred to an increase in a number of trips and the same for 2 out of 5 EU-15

<sup>187</sup> 7 and 6 out of 8 among EU13 and 3 and 2 out of 5 indicated increase of number of vehicles used or drivers employed respectively

<sup>188</sup> AT, RO, PL, CZ, FR

and do not already pay for accommodation. . Significant additional costs will arise in these cases to cover the accommodation costs (in the range of €50-160 for a 45 hour regular rest period) and possible additional costs to plan driver schedules appropriately. However, the share of operators affected is unclear.

A small positive impact on businesses is expected from **Measure (5)** (a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each). Most industry representatives at national<sup>189</sup> and EU level<sup>190</sup> considered that it will provide additional flexibility to operators without having any cost implications.

Abolishing attestation forms (**Measure (11)**) will bring some administrative cost savings for a number of operators by eliminating the significant time that drivers need to fill in the forms (Ricardo et al, 2016). However, the use of attestation forms is relatively limited given that they are required in only 5 Member States<sup>191</sup> and in most other Member States alternative proof can be provided. 42 out of 69 respondents to the operators' data request indicated they do not use any attestation forms, however 10 out of 14 non-Hungarian respondents indicated that they did use attestation forms. As a result, when asked to assess the impact on annual operating costs from the measure most operators (41) indicated that this is not applicable. A smaller number (8) indicated that they expect increase of costs and 5 a decrease. Overall, the cost implications for this measure are expected to be rather small, although this will depend on the alternative approach for recording the time away from the vehicle. Requiring that this information is entered manually in the tachograph will not raise any costs for most operators. However, for the significant share of operators with analogue tachographs – still 38% of the total fleet on average (see also Section 5.2.5.1) - it may introduce significant additional one-off costs to replace the tachographs, if an alternative approach is not identified.

Reducing the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months to 4 weeks (**Measure (13)**) should introduce some one-off costs to train drivers on new provisions, although no stakeholder identified this as a relevant cost. Such training could be combined with other training so that any costs are minimised. Additional costs for monitoring working time over the 4 week period should also be limited since operators already have to monitor working time. However, according to the German association there will be additional administrative costs from the need to calculate working time more often (12 times/year rather than 2 or 3/year). Specific estimates of the extra time needed were not provided, but the use of a 4 week period will make it easier to rely on tachograph data to monitor working time and should help minimise any extra time needed. Overall, these costs will most probably be very limited.

Many industry representatives focused on the negative implications of moving to a much shorter 4 week reference period, which is expected by some stakeholders to have a negative impact on the planning and organisation of working time and thereby result in extra costs for the employers (hauliers from Hungary, Poland; associations from Germany, Czech Republic, Poland and UETR). The measure may also result in the need to hire more drivers and purchase more vehicles (hauliers from Czech Republic and Slovakia; association from Austria). UETR indicated that labour costs may increase significantly, particularly in Member States where there is a threshold above which hourly compensation increases significantly. However, none of the stakeholders provided estimates of the additional costs that may arise from this change.

In contrast to the above, two hauliers from Slovakia and Bulgaria and the Nordic Logistic Association argued that the proposed measure will not have any impact for

---

<sup>189</sup> AT, BG, CZ, ES, PL, RO, DK, FR

<sup>190</sup> UETR, NLA, UEAPME

<sup>191</sup> According to Ricardo (Ricardo et al, 2016) they are required in 5 MS (DE, HR, PL, PT, SI) and accepted in 16 (UK, SK, SE, RO, SI (for non-national), NL, LV, LU, LT, HU, FI, EE, CZ, BG, BE, AT)

hauliers that do not rely on seasonal employment to address demand fluctuations and only have full time employees.

Overall, while compliance or administrative costs are expected to be limited, there will probably be a negative impact on some transport operations by reducing flexibility. Some operators and their representatives suggest that the measure will lead to an increase in the number of drivers – and even vehicles – needed as a result of the reduced reference period, particularly in the case of operations characterised by high seasonal fluctuations. While it has not been possible to develop estimates of these costs, the qualitative input provided suggest that operators in some sectors will probably face a measurable increase in operating costs.

**Measure (14C)** - setting a minimum threshold for controls of working time provisions - may have an impact to operators by increasing the number of checks and adding some extra time to the duration of the roadside and premises checks. The total number of checks will depend on the threshold set but the basic idea of the measure is that the checks will take place in parallel to existing roadside and premises checks. Data on the current number of working time checks is very limited<sup>192</sup> but information provided by a few Member States for the period 2013-2014, suggests a range of 1,000-10,000 checks per Member State (European Commission, 2016b). In comparison, the number of premises and/or drivers checked under Regulation 561/2006 was in most cases 5-10 times greater (European Commission, 2016b) suggesting that, in total, a significantly higher number of operators may be affected.

Estimates of the additional time that may be needed for each control were not provided by either authorities or operators. Earlier input by authorities (Ricardo et al, 2016) suggested that working time checks tend to be more demanding and time consuming with 14 of 21 enforcers<sup>193</sup> suggesting that the time needed for detecting infringements can be excessive. However, the Dutch authorities that participated in the study visits indicated that these checks – based on tachograph records – tend to take only a few minutes although there are often problems with checking availability time. Other authorities (e.g. Germany) consider that it is possible to check working time at the roadside although verification of “periods of availability” can be ambiguous (Ricardo et al, 2016). Thus, assuming that a standard approach on checking period of availability is established, a changing of the reference period to 4 weeks should make these checks easier and faster. However, at this stage this remains unclear.

Overall, we expect certain additional costs for operators from the proposed measure. If a standard approach to checks addressing the issue of period away from the vehicle is identified, these costs should remain rather limited. Adding a few more minutes to the existing checks - in the case that tachograph data for the last 4 weeks will be sufficient for these controls. More demanding procedures to check availability time will probably pose a more significant additional burden.

Finally, in terms of impact on non-compliance costs, the analysis of impacts on compliance from measures in PP2 suggest a small positive effect as a result of improved enforcement and increased clarity. This should also lead to a small reduction to the estimated annual non-compliance costs of €14.5 million in the form of penalties in the last reporting period.

**Table 6-40: Summary of impacts from PP2**

Measure	Impact
Overall impact of PP1	Net impact (negative or positive) expected to be very limited.
(1) Calculating the required regular weekly rest period of 45 hours as a	Small (most probably) savings arising from increased flexibility that will outweigh any short term costs for

<sup>192</sup> Data for Bulgaria, Czech Republic, France, Greece, Luxembourg, Poland, Spain available in the 28<sup>th</sup> monitoring report (2013-2014)

<sup>193</sup> Enforcers from AT, NL, 2 from DE, 2 from SE, CZ, SK, 2 from SI, LV, BE, FI, EL, EE

Measure	Impact
minimum average resting time over a reference period of rolling 4 weeks.	most operators.
(2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'.	Small additional costs per trip (in the range of €50-160 per week) for important share of operators (mainly in EU13) that allow or actively promote drivers to spend their regular weekly in vehicles. No impact for those that already cover accommodation costs.  Possible additional costs from the necessary planning needed to ensure that drivers will have access to the necessary facilities at the time of the regular weekly rest.
(5) For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged.	Very small savings from additional flexibility to operators without having any cost implications.
(11) Abolish attestation forms on top or instead of tachograph records and define how 'other' work is best controlled	Uncertain. Some cost savings for operators that use attestation forms. Overall implications depend on the alternative approach to control other work.  One-off cost for change of tachograph may arise for those with analogue tachographs if manual entry in tachograph is selected.
(13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks.	Limited compliance or administrative costs are expected.  Increase in operating costs (more drivers) expected for operators affected by seasonal fluctuations.
(14C) Extend checks at the roadside and at premises also to compliance with working time establishing a voluntary minimum threshold for controlling compliance under Directive 2006/22	Limited additional cost (in the form of time spent) from additional checks and time required if tachograph data are sufficient for controls.  More costly if additional evidence needed for periods away from vehicle.
Measures of PP2 that have impact on compliance levels	Overall, small reduction to the overall annual non-compliance costs of €14.5 million should be expected as a result of the positive, but small, impact on the compliance levels
Overall impact of PP2	Small additional costs expected for a large share of operators.

#### 6.2.1.3. PP3 - Targeted revisions of the social legislation

In addition to any impacts under policy package 2, policy package 3 should have an additional impact on business as a result of the following measures:

- (6) Adapt '12-day rule' in international occasional passenger transport by coach
- (7) Allow for flexibility for domestic occasional transport of passengers by coach:
  - (7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.
  - (7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.
- (17b) Forbid all performance based payment (based on distances travelled / amount of goods carried).

The adaptation of the 12-day rule (**Measure (6)**) will essentially lead to the removal of the additional compensation time required at the end of the 12-day derogation. Operators will need to make changes to their scheduling monitoring systems and possibly train drivers regarding the new rules. However, such training can be coordinated with other training activities and should have very limited, if any, additional costs.

In the longer term, the measure will provide additional flexibility to international passenger transport operations and reduce the drivers' rest time by 21 hours per derogation. An Austrian industry representative and UEAPME pointed out this will help reduce drivers' downtime and reduce costs. In the possibly extreme case of a driver involved in continuous 12-day trips over a long period, the new rules allow for an increase in the number of operations. According to the Dutch Trade Union an increase from 15.5 to 16.5 trips over a 6 months period<sup>194</sup> which, assuming a standard turnover per trip, suggests a potential increase of 6.5% increase in turnover over the same period and for the same level of labour costs (decrease average cost per trip). An increase in profitability at a lower level once other costs for organising the trip and fixed costs for the vehicle are taken into account. Even if this is rather uncommon, it should be expected that operators should expect cost savings from the proposed measure.

**Measure 7 (a or b)** should further extend the benefits described above to domestic passenger transport operations. Given that the current rules do not allow for more than 6 days of continuous work, operators will benefit from an increased number of trips over a certain period – as a result of reduced overall rest days needed. They will be able to reduce costs by not having to use a second driver in the case of long trips of 8 or 12 days without 2 day breaks. Industry representatives<sup>195</sup> indicated that savings from reduced salary costs should be expected.

Having said that, the share of domestic trips that last more than 6 days is probably relevant to only some Member States. Data from the 2009 report by SDG (2009) for international transport suggested that trips of 6 days or more represent around 45% of the total, although this figure was considered highly uncertain. In the case of domestic transport, the share of 6-day trips across the EU expected to be lower given the small size of the majority of Member States, a point made by the Dutch trade union as well as 27 individual drivers (including 25 drivers from the Netherlands that provided coordinated responses).

In terms of actual impacts on costs and profitability, a 2008 study for the European Parliament concluded that the impact on the cost of a 12-day trip would be around 3% (PWC, 2008). A subsequent study (Steer Davis Gleave, 2009) considered that this was an overestimate, and suggested of the cost would be around 2.3% instead. Furthermore, in the case of domestic transport some of the costs may also be lower (e.g. travel expenses of drivers to and from the tour). It is reasonable to assume that similar type of savings may apply in the case of the introduction of the 12-day derogation to domestic transport, even though this 2.3% may be the upper estimate of the cost per trip.

In the case of the 8 day derogation a smaller level of savings can be expected since the difference with the existing rule (that allows up to 6 days) before rest is significantly smaller.

In relation to **measure (17b)** (forbid all performance based payment), operators that currently use such systems will incur some adjustment costs if changes to payroll systems are needed. Any longer-term impact depends on whether existing variable payments will be compensated by increases in fixed salaries or whether operators will

---

<sup>194</sup> This is in line with our own calculations as part of the analysis of the measure on fatigue (Section 6.1.2)

<sup>195</sup> AT, PL, ES, BG, and UEAPME

actually chose to reduce average pay, taking also into account the fact that fixed salaries may also require other employer contributions (e.g. social security).

As already discussed earlier (Section 6.1.5.1) there is no strong evidence pointing to a specific direction. An overall increase in labour costs through a full compensation of drivers may occur, although operators should be expected to aim to maintain overall labour costs at similar levels. This may depend on the demand and supply for drivers and will vary among operators and the extent that can maintain their labour force with reduced level of pay.

Overall, the available evidence does not allow to reach clear conclusions as to the impact on operators. The great majority of industry representatives, including from the EU-13, seem to suggest that there will not be any impact. However, the existing data on the prevalence of performance based schemes in EU-13 suggests that a significant number of operators will be affected (although as indicated in the analysis of measure (17a), there is no clear view as to the exact level of use of such payments).

Finally, in terms of impact on non-compliance costs, the analysis of impacts on compliance from measures in PP3 suggests that further savings in comparison to Policy Package 2 should be expected to the annual non-compliance costs of €14.5 million. This is mainly a result of measure (17b), and to a lesser extent also measure (6) (which applies to only small share of operations).

**Table 6-41: Summary of impacts from PP3**

Measure	Impact
Overall impact of PP2	Small additional costs expected.
(6) Adapt '12-day rule' in international occasional passenger transport by coach	Small decrease in average cost per trip for operators (<5%) involved in international transport by coach.
(7) Allow for flexibility for domestic occasional transport of passengers by coach:	
<ul style="list-style-type: none"> <li>(7 a) '12-day rule' –postpone weekly rest for up to 12 periods of 24h, etc.</li> </ul>	<p>Up to 2.3% savings per trip estimated for those operators that organise long domestic passenger transport operations.</p> <p>Benefits probably limited to a few large Member States.</p>
<ul style="list-style-type: none"> <li>(7 b) '8-day rule' –postpone weekly rest for up to 8 periods of 24h, etc.</li> </ul>	<p>Significantly smaller savings per trip than under the 12-day rule (7a) for those operators that organise long domestic passenger transport operations.</p> <p>Benefits probably limited to a few large Member States.</p>
(17b) Forbid all performance based payment (based on distances travelled / amount of goods carried)	Unclear. Available evidence does not allow to reach clear conclusions as to the impact on operators. Impact on EU15 operators where performance based is generally limited will be close to zero. In the EU-13, impact may vary although expect operators to aim to minimize any increase of total labour costs.
PP3 measures that have an impact on compliance	Sizeable reduction to the €14.5 million of annual non-compliance costs as a result of significant increase in levels of compliance.
Overall impact of PP3	Cost savings for passenger transport sector most probably outweigh overall costs as a result of PP2.

#### **6.2.1.4. PP4 - Revisions to PWD – horizontal policy option**

The revision of the PWD (**Measures 18-20**) will have impacts on both the compliance costs and the administrative costs for operators.

The following changes in the provisions are of relevance for the operators costs:

- The revised PWD will apply in all EU-28 Member States, not only in the small number of Member States that at the moment thoroughly apply wage laws. In consequence the administration and compliance costs that only were applicable in minimum wage host countries before are now applicable in all EU-28 Member States.
- The provisions will be the same for all Member States. This means that the currently differing national measures for posting of workers (in Austria, Germany, France and Italy) will be harmonised.
- The revision of the PWD foresees a reduction in administration costs for operators. The process will be made easier by reducing the paperwork for operators and shifting administrative burden to the host country authorities. The main reductions in administrative costs for trips above the threshold will be around:
  - Pre-notifications, which will not be required any longer;
  - Local representative. Posting operators will not have to have a local representative in the host country;
  - Translation for the posting documents have not to be provided by operators anymore.
- PP4 will also introduce time thresholds (5, 7 or 9 days/month) below which trips will not fall under the posting provisions on minimum wage and annual paid holidays. The compliance costs for such trips will thus be zero. The administrative costs however are assumed to be the same as for trips above the threshold.

#### **Administrative costs under PP4**

The administrative costs connected to national measures for posting of workers were calculated for the baseline (see Section 5.3.5.2). Based on data provided by a Czech industry association and adjusted with data from an Austrian industry association, the administrative costs for a Czech operator were estimated at €10.72 per trip for the paperwork and an additional €11.26 per trip for the cost of local representative (as currently required in France). Using these figures as a basis we have reduced the administrative cost values by subtracting the cost related to the pre-notification, translation and the local representative to obtain the administrative costs for all trips.

The administrative costs available from the Czech industry association for the paperwork covers the additional records of working time, the gathering and collating the information on transport contracts, the creation of special payslips and the documentation of deductions from pay. No split of costs is provided by administrative costs component. Due to the lack of this information we had to make estimates on the administrative cost related to the pre-notification and the translation.

The 2012 Preparatory study for an Impact Assessment concerning the possible revision of the legislative framework on the posting of workers in the context of the provision of services (Ismeri, 2012) provides data on the administrative costs related to the notification only. This data is available for each posting Member State. For the Czech Republic the administrative costs related to the notification is given as €5.51 per posting, assuming that the paperwork takes 15 minutes and using a labour cost of €22.03. For simplification we will assume that one posting equals one trip.

From the stakeholder input no data could be obtained on the costs related to the translating of documents for a posting. For now we have set those costs to zero as it is

not clear if they were included in the Czech data provided and the main focus will be on the analysis of differences between the administrative costs in the baseline compared to PP4.

The administrative costs for providing a local representative, as currently required for France, was provided separately by the Czech industry association and can be easily subtracted from the original administrative costs.

Table 6-42 provides an overview of the changes in administrative costs between the current situation and the PP4 scenario. As expected the reduction in administrative costs are particularly significant for France where a local representative is required.

**Table 6-42 Changes in administrative costs**

	Germany	France	Notes
<b>Current administrative costs</b>			
Administrative costs under the current minimum wage laws [€/trip]	10.72	21.98	As estimated for the baseline
<b>Costs components that will be deducted under PP4</b>			
Notification cost [€/posting]	5.51	5.51	Assuming that the notification alone takes 15 minutes and that the labour cost per hour is €22.03
Notification cost [€/trip]	5.51	5.51	Assuming 1 trip equals 1 posting
Translation cost [€/trip]	0	0	Assumed to be 0 due to the lack of available data
Local rep cost [€/trip]	N/A	11.26	As used estimated for the baseline
<b>Admin costs under PP4</b>			
Administrative costs under PP4 [€/trip] for trips above the time threshold	5.21	5.21	Current costs – cost components that will be deducted

Since under PP4 the provisions will be harmonised across all host countries, we assume the same administrative efforts per trip for all EU-28 countries. Differences in actual costs will arise from different labour costs in the posting countries. Using the same approach as for the baseline (indexing the Czech administrative costs value according to labour costs from Eurostat as described in Section 5.3.5.2) the administrative cost value is adjusted for each posting country.

The administrative cost per trip has then been multiplied with the number of international and cabotage trips as provided by the DTU (2017). The limitations of the data provided by DTU is that it only covers 10 host Member States<sup>196</sup> and the calculations thus only present a share of the total costs across all EU-28 Member States. These calculations are carried out for each posting country to obtain the total annual administrative costs for 2035 (see Table 6-43). The 2035 values are calculated

<sup>196</sup> AT, BE, BG, DE, ES, FR, NL, PL, RO, SE

using the calculated administrative costs per trip detailed above. The overall transport activity changes in line with the 2016 Reference Scenario (European Commission, 2016a). These values are unadjusted and do not take into account changes in transport activity as a result of increased or decreased operating costs.

**Table 6-43 Annual administrative costs for operators under PP4 – UNADJUSTED**

Administrative costs [million €/year]	
Posting country	2035
Austria	17
Belgium	75
Bulgaria	2
Croatia	1
Cyprus	N/A
Czech Republic	15
Denmark	10
Estonia	1
Finland	5
France	30
Germany	80
Greece	N/A
Hungary	9
Ireland	1
Italy	16
Latvia	2
Lithuania	4
Luxembourg	40
Malta	N/A
Netherlands	144
Poland	44
Portugal	9
Romania	4
Slovakia	9
Slovenia	7
Spain	35
Sweden	2
United Kingdom	6
<b>Total</b>	<b>567</b>
<b>EU15</b>	<b>470</b>
<b>EU13</b>	<b>97</b>

#### Compliance costs under PP4

In terms of compliance costs, the main change under the new PWD provisions is that under PP4 in all EU28 Member States the drivers are eligible for the minimum remuneration of the host country, whereas previously that was only the case for Member States that had effective wage laws in place.

Using the same approach as developed for the baseline (see Section 5.3.5.2) we have calculated the total annual compliance costs by comparing the actual remuneration for the posting country with the minimum remuneration of the host country. Where

drivers are already paid (on average) at least the minimum remuneration of the host country, no compliance costs are incurred. In the countries where the actual remuneration lies below the minimum remuneration, the compliance costs are calculated by multiplying the difference with the number of trips above the threshold in the respective posting country – host country category. Table 6-44 shows the annual compliance for 2035. The transport activity on the other hand is indexed to the 2016 EU Reference Scenario (European Commission, 2016a).

**Table 6-44: Annual Compliance costs for operators under PP4 – UNADJUSTED**

Compliance costs [million €/year]				
	2035			
Posting country	All trips	5 day threshold	7 day threshold	9 day threshold
Austria	0	0	0	0
Belgium	0	0	0	0
Bulgaria	24	7	5	3
Croatia	2	1	0	0
Cyprus	N/A	N/A	N/A	N/A
Czech Republic	60	23	16	12
Denmark	0	0	0	0
Estonia	3	1	1	0
Finland	0	0	0	0
France	0	0	0	0
Germany	7	2	1	1
Greece	N/A	N/A	N/A	N/A
Hungary	59	20	14	11
Ireland	0	0	0	0
Italy	0	0	0	0
Latvia	16	5	3	2
Lithuania	37	10	7	5
Luxembourg	0	0	0	0
Malta	N/A	N/A	N/A	N/A
Netherlands	0	0	0	0
Poland	197	63	43	30
Portugal	7	2	1	1
Romania	35	10	7	5
Slovakia	30	11	8	6
Slovenia	2	1	0	0
Spain	1	0	0	0
Sweden	0	0	0	0
United Kingdom	0	0	0	0
<b>Total</b>	<b>480</b>	<b>155</b>	<b>107</b>	<b>77</b>
<b>EU15</b>	<b>16</b>	<b>4</b>	<b>3</b>	<b>2</b>

Compliance costs [million €/year]				
	2035			
Posting country	All trips	5 day threshold	7 day threshold	9 day threshold
<b>EU13</b>	<b>464</b>	<b>151</b>	<b>105</b>	<b>75</b>

### Change in administrative and compliance costs under PP4 compared to the baseline

To estimate the impact of PP4 on operator costs, we have compared the above calculated values with the figures from the baseline. The percentage changes in costs for operators in 2035 compared to the baseline are presented in Table 6-45. The figures show that the compliance costs reduce for all three thresholds for all 15 EU Member States that showed compliance costs in the baseline. The EU-wide reduction is 63% (from €423 million/year in the baseline to €155 million/year under PP4 for the 5 day threshold). The reductions range from 59% in Czech Republic and Slovakia to 84% in Spain for the 5 day threshold. For the 7 and 9 day threshold the reductions are as expected even higher with up to 92% in Spain. This shows that even though the new PWD provisions introduced that minimum wage laws have to be applicable in all EU28 Member States, the savings in compliance costs for the Member States that have minimum wages in place in the baseline outweigh the additional compliance costs due to the introduction of minimum wages across all EU28 Member States.

If no threshold was in place and compliance costs would apply to all trips, the total compliance costs would increase by 13% EU-wide (from €423 million/year in the baseline to €480 million/year).

The administrative costs also reduce significantly across all Member States. The EU average is a reduction of 58% (from €1,349 million/year in the baseline to €567 million/year under PP4). The highest reductions can be observed for Spain (-58%). For Portugal the administrative costs even increase due to the high share of activity in Spain, a Member State that currently does not have minimum wage laws in place.

**Table 6-45 Change in compliance and administrative costs for operators under PP4 in comparison to the baseline (2035) -- UNADJUSTED**

Change in costs compared to the baseline					
Posting country	Compliance costs				Administrative costs
	All trips	5 day threshold	7 day threshold	9 day threshold	
Austria	0%	0%	0%	0%	-52%
Belgium	0%	0%	0%	0%	-66%
Bulgaria	16%	-66%	-76%	-83%	-40%
Croatia	12%	-67%	-77%	-84%	-49%
Cyprus	N/A	N/A	N/A	N/A	N/A
Czech Republic	9%	-59%	-71%	-78%	-51%
Denmark	0%	0%	0%	0%	-52%
Estonia	8%	-65%	-76%	-84%	-38%
Finland	0%	0%	0%	0%	-50%
France	0%	0%	0%	0%	-41%
Germany	0%	-70%	-81%	-87%	-51%

Change in costs compared to the baseline					
Posting country	Compliance costs				Administrative costs
	All trips	5 day threshold	7 day threshold	9 day threshold	
Greece	N/A	N/A	N/A	N/A	N/A
Hungary	10%	-62%	-73%	-80%	-50%
Ireland	0%	-79%	-86%	-90%	-49%
Italy	0%	0%	0%	0%	-66%
Latvia	9%	-67%	-78%	-85%	-54%
Lithuania	14%	-68%	-79%	-85%	-55%
Luxembourg	0%	0%	0%	0%	-64%
Malta	N/A	N/A	N/A	N/A	N/A
Netherlands	0%	0%	0%	0%	-56%
Poland	18%	-62%	-74%	-82%	-53%
Portugal	11%	-72%	-83%	-87%	-31%
Romania	9%	-70%	-79%	-85%	-58%
Slovakia	10%	-59%	-71%	-78%	-56%
Slovenia	18%	-67%	-79%	-85%	-54%
Spain	0%	-84%	-88%	-92%	-72%
Sweden	0%	0%	0%	0%	-37%
United Kingdom	0%	0%	0%	0%	-59%
<b>Total</b>	<b>13%</b>	<b>-63%</b>	<b>-75%</b>	<b>-82%</b>	<b>-58%</b>
<b>EU15</b>	<b>5%</b>	<b>-72%</b>	<b>-83%</b>	<b>-87%</b>	<b>-59%</b>
<b>EU13</b>	<b>14%</b>	<b>-63%</b>	<b>-74%</b>	<b>-82%</b>	<b>-53%</b>
<b>Net reduction / increase EU28 [million€/year]</b>	<b>57</b>	<b>-268</b>	<b>-316</b>	<b>-347</b>	<b>-782</b>
<b>Net reduction / increase EU15 [million€/year]</b>	<b>1</b>	<b>-11</b>	<b>-12</b>	<b>-13</b>	<b>-673</b>
<b>Net reduction / increase EU13 [million€/year]</b>	<b>56</b>	<b>-257</b>	<b>-303</b>	<b>-333</b>	<b>-109</b>

### Compliance and administrative costs adjusted by impact of change in cost on transport activity

In line with our calculations in the baseline (see Section 5.3.5.2) we have assumed that again the change in administrative and compliance costs will have an impact on the transport activity. We have calculated the change in administration and compliance costs per trip compared to the baseline scenario, which assumed minimum wage laws in selected Member States. For each time threshold an average cost connected to minimum wage provisions has been calculated per trip by using a weighted average of costs for trips above and below the threshold. These slightly different changes in costs for the different thresholds then result in different changes in activity. As in the baseline we have used an elasticity of 1.0, in line with Significance et al (2010). The total administrative and compliance costs are then

calculated by multiplying the costs per trip with the adjusted number of annual trips across all posting and host countries.

Table 6-46 **Error! Reference source not found.** and

**Table 6-47** show the adjusted annual administrative and compliance costs. Table 6-48 shows the changes in administrative costs and compliance costs compared to the adjusted baseline figures.

**Table 6-46: Administrative costs for operators under PP4 – Adjusted for impacts on transport activity**

Administrative costs [million €/year]	
Posting country	2035
Austria	16
Belgium	67
Bulgaria	1
Croatia	1
Cyprus	N/A
Czech Republic	14
Denmark	9
Estonia	1
Finland	4
France	29
Germany	76
Greece	N/A
Hungary	9
Ireland	1
Italy	15
Latvia	2
Lithuania	4
Luxembourg	38
Malta	N/A
Netherlands	137
Poland	41
Portugal	9
Romania	4
Slovakia	8
Slovenia	7
Spain	34
Sweden	2
United Kingdom	6
<b>Total</b>	<b>536</b>
<b>EU15</b>	<b>445</b>
<b>EU13</b>	<b>91</b>

**Table 6-47: Compliance costs for operators under PP4 - Adjusted for impacts on transport activity**

Compliance costs [million €/year]				
	2035			
Posting country	All trips	5 day threshold	7 day threshold	9 day threshold
Austria	0	0	0	0
Belgium	0	0	0	0
Bulgaria	17	6	4	3
Croatia	2	1	0	0
Cyprus	N/A	N/A	N/A	N/A
Czech Republic	51	21	15	11
Denmark	0	0	0	0
Estonia	2	1	1	0
Finland	0	0	0	0
France	0	0	0	0
Germany	7	2	1	1
Greece	N/A	N/A	N/A	N/A
Hungary	48	19	13	10
Ireland	0	0	0	0
Italy	0	0	0	0
Latvia	12	4	3	2
Lithuania	25	8	6	4
Luxembourg	0	0	0	0
Malta	N/A	N/A	N/A	N/A
Netherlands	0	0	0	0
Poland	160	57	40	28
Portugal	6	2	1	1
Romania	27	8	6	4
Slovakia	24	10	7	5
Slovenia	2	1	0	0
Spain	1	0	0	0
Sweden	0	0	0	0
United Kingdom	0	0	0	0
<b>Total</b>	<b>386</b>	<b>139</b>	<b>98</b>	<b>71</b>
<b>EU15</b>	<b>14</b>	<b>4</b>	<b>2</b>	<b>2</b>
<b>EU13</b>	<b>372</b>	<b>135</b>	<b>95</b>	<b>69</b>

**Table 6-48: Change in compliance and administrative costs for operators under PP4 in 2035- Adjusted for impacts on transport activity**

Change in costs 2035 compared to the baseline					
Posting country	Compliance costs				Administrative costs
	All trips	5 day threshold	7 day threshold	9 day threshold	
Austria	0%	0%	0%	0%	-48%
Belgium	0%	0%	0%	0%	-57%
Bulgaria	18%	-60%	-71%	-80%	-26%
Croatia	15%	-63%	-74%	-81%	-46%
Cyprus	N/A	N/A	N/A	N/A	N/A
Czech Republic	11%	-54%	-67%	-75%	-47%
Denmark	0%	0%	0%	0%	-48%
Estonia	12%	-60%	-72%	-81%	-32%
Finland	0%	0%	0%	0%	-47%
France	0%	0%	0%	0%	-41%
Germany	5%	-68%	-80%	-86%	-45%
Greece	0%	N/A	N/A	N/A	N/A
Hungary	13%	-56%	-69%	-77%	-43%
Ireland	5%	-77%	-86%	-89%	-43%
Italy	0%	0%	0%	0%	-62%
Latvia	14%	-61%	-73%	-81%	-46%
Lithuania	20%	-61%	-74%	-81%	-43%
Luxembourg	0%	0%	0%	0%	-60%
Malta	0%	N/A	N/A	N/A	N/A
Netherlands	0%	0%	0%	0%	-53%
Poland	23%	-57%	-69%	-78%	-48%
Portugal	18%	-68%	-81%	-85%	-24%
Romania	12%	-65%	-76%	-83%	-52%
Slovakia	15%	-54%	-67%	-74%	-52%
Slovenia	26%	-61%	-75%	-82%	-51%
Spain	4%	-82%	-87%	-91%	-69%
Sweden	0%	0%	0%	0%	-32%
United Kingdom	0%	0%	0%	0%	-54%
<b>Total</b>	<b>17%</b>	<b>-58%</b>	<b>-70%</b>	<b>-79%</b>	<b>-53%</b>
<b>EU15</b>	<b>10%</b>	<b>-69%</b>	<b>-81%</b>	<b>-86%</b>	<b>-54%</b>
<b>EU13</b>	<b>18%</b>	<b>-57%</b>	<b>-70%</b>	<b>-78%</b>	<b>-48%</b>
<b>Net reduction / increase EU28 [million€/year]</b>	<b>57</b>	<b>-190</b>	<b>-231</b>	<b>-259</b>	<b>-605</b>

Change in costs 2035 compared to the baseline					
Posting country	Compliance costs				Administrative costs
	All trips	5 day threshold	7 day threshold	9 day threshold	
<b>Net reduction / increase EU15 [million€/year]</b>	<b>1</b>	<b>-9</b>	<b>-11</b>	<b>-11</b>	<b>-522</b>
<b>Net reduction / increase EU13 [million€/year]</b>	<b>55</b>	<b>-181</b>	<b>-221</b>	<b>-248</b>	<b>-83</b>

The analysis of the changes in administrative and compliance costs for businesses due to the changes in provisions for the PWD shows that across all Member States the introduction of measure (18) would lead to a significant reduction both in administrative and compliance costs. Looking at the figures adjusted for impacts on transport activity shows that the EU wide reduction in compliance costs for the 5 day threshold is 58% (from €329 million/year in the baseline to €139 million/year under PP4). The reduction in administrative costs for the EU as a whole is 53% (from €1,141 million/year in the baseline to €536 million/year under PP4). The reductions in annual costs is higher for EU15 Member States than for EU13 Member States. Looking at the absolute annual numbers though it becomes clear that the changes in compliance costs are of significantly higher importance for EU13 Member States, as 97% of the total compliance cost is allocated to EU13 Member States. For administrative costs again the percentage reductions are higher for EU15 Member States. Here the picture in terms of total administrative costs is the opposite. 82% of the EU-wide administrative costs can be attributed to EU15 operators.

If no threshold was in place and compliance costs applied to all trips, PP4 would result in an increase of total compliance costs across the EU of 17% (from €329 million/year in the baseline to €386 million/year under PP4).

In terms of differences in impacts due to different thresholds, as expected, the reductions increase with an increase from the threshold.

Finally, in relation to non-compliance costs, the assessment of the impacts on compliance (see Section 6.1.1.4) suggest an overall unclear impact. However, measure 18 has a significant impact on the overall scope of the legislation (even more so in the case of 9 day threshold) that will simplify the rules, increase clarity and improve enforcement. The impact from the other two measures (19) and (20) is less clear – and may lead to higher levels of fines from non-compliance. However, the overall impact should still be towards a reduction of the non-compliance costs in comparison to the baseline.

**Table 6-49: Summary of impacts of PP4**

Measure	Impact
(18) Set time-thresholds (measured as the number of days and nights spent in a host Member State over a month). Variant a – 5 days, variant b – 7 days and variant c – 9 days	Significant reductions in administrative and compliance costs. Reductions in compliance costs range from 58% (5 day threshold) to 79% (9 day threshold). Reductions in administrative costs across the EU are 53%.
Measures affecting compliance with posting rules	Reduction of overall non-compliance costs expected due to significantly reduce scope, greater clarity and simplification.
Overall impact of PP4	Significant positive impact on operators' administrative and compliance costs.

### **6.2.2. Impacts on costs for authorities**

Feedback from respondents to the survey of authorities was the main source of input on the potential cost impacts of measures on costs / savings to authorities. Due to the large number of measures assessed, and the need to gather feedback from authorities on a very wide range of other issues, the survey only included questions (approved by the Commission) on percentage changes costs in general terms – without differentiating between different potential elements. The weighted average estimated additional cost impacts on enforcement can give a sense of the relative direction, scale and importance of the impacts of each measure, but cannot be interpreted directly as being specific impacts (e.g. on fixed versus ongoing costs / savings). Note that respondents were asked each time to identify the balance between cost increases and decreases (savings). Qualitative open-ended questions were included in the survey that aimed to draw out comments on the nature of the costs so that they could be distinguished, and input from interviews has also been used to supplement the analysis.

This section focusses on issues that affect the costs of enforcement – other possible non-monetary impacts (e.g. in terms of more effective enforcement, better social conditions etc.) were assessed elsewhere in this report (Sections 6.1.1-6.1.7).

Since input provided by authorities typically referred to percentage change of the enforcement costs, and did not include absolute figures, the estimation of the actual level of additional costs is challenging. As a basis to assess the scale of the impact – in rather general terms – we use the estimated annual costs for enforcement provided in Ricardo (2016). As indicated in section 5, the cost of enforcement staff – estimated in the range of €300-500 million annually – represented the most important cost item. Other cost items include costs for training - estimated at €12 million/year and costs for the TACHONET (€1.7 million/year). One-off costs for software and hardware equipment (€47.5 million) to support enforcement were also identified but no data on the annual maintenance costs were provided.

#### **6.2.2.1. PP1 – Clarification of the legal framework & improve cooperation**

The main measures that are expected to have a relevant impact on the cost to authorities are summarised in Table 6-50, which also shows the estimated weighted average impact on enforcement costs from respondents to the survey of authorities. It can be seen that:

- Measures are generally expected to result in cost increases. There is generally agreement between EU-15 and EU-13 respondents that this is the case (in terms of the direction of the impacts), but the magnitude of impacts is generally estimated to be higher in EU-15 countries.
- The measure that is expected to have the most significant additional costs is **measure (10)** that sets out response times for authorities. However, analysis of similar proposals in related areas found that the additional costs were not expected to be significant – this was found in the context of revisions to Regulation 1071/2009 and 1072/2009 (Ricardo et al., 2017), as well as cooperation for the enforcement of the Posting of Workers Directive (considering a maximum period of 2 weeks (European Commission, 2012)).
- On average, EU-15 authorities indicated higher additional costs from measure (10ii) (25 days for non-urgent matters) than in the case of measure (10i) (2 days response for urgent matters). There was no specific explanation provided for this which seems to go against what should be expected (higher costs for more demanding deadlines). Speculatively, it could be that some Member States expected a higher volume of non-urgent cases. In the absence of clear explanations, we consider that this should be interpreted with caution.

**Table 6-50: Weighted average of estimated increase in enforcement costs due to relevant measures in PP1 according to national enforcement and implementing authorities**

Measure	Overall	EU-15	EU-13	Nature of costs affected
(3) Allow for spending the regular weekly rest in the vehicle	3.3%	4.5%	0.9% <sup>197</sup>	Additional documentation required (NO, SE) More complex enforcement, esp. proving free choice (see Section 6.1.1 on compliance) Changes to legislation (FR)
(10i) Enhance administrative cooperation - response in 2 days (urgent)	5.5%	6.4%	3.3% <sup>198</sup>	Additional staff to respond to requests (FR, SE, SL, BE, LT, NL) 2 day limit is too restrictive (BE, GR, FR, SK)
(10ii) Response in 25 days (non-urgent)	4.3%	7.2%	1.1% <sup>199</sup>	
(16) Define operations of occasional non-professional driver for private purposes and exclude	3.0%	3.1%	1.7%	Time consuming to verify (CY, NL, SE, NO) Training (PT)

Notes: Red = ≥10% increase, orange = 5-10% increase, white = ±5% change

Source: Survey of authorities. 17 respondents from EU-15 and 13 from EU-13. Positive numbers indicate cost increases, negative numbers indicate cost decreases.

In addition to the core measures of PP1, the series of voluntary measures would have some associated costs for Member States that choose to adopt them (the specific costs are analysed in the next section on PP2). However, since Member States are not obliged to implement any of the measures, it can be assumed that they would only do so in cases where the benefits outweighed the costs. Hence, it can be assumed that the voluntary measures would have net benefits, although it is not possible to quantify these in monetary terms to allow for a cost-benefit analysis due to a lack of data. Qualitatively, expected benefits from the voluntary measures are analysed elsewhere (see Section 6.1.1 on compliance and Section 6.1.5 on working conditions).

Table 6-51 summarises the overall impact on costs to authorities. On the basis of the estimated annual costs for enforcement staff of €300-500 million (see baseline), the

<sup>197</sup> The enforcement authorities in Estonia (Estonian Police and Border Guard Board) indicated that they expect a reduction to the costs by 5-15% while the Ministry of Transport expects the costs to remain the same.

<sup>198</sup> The enforcement authorities in Estonia (Estonian Police and Border Guard Board) indicated that they expect a reduction to the costs by 5-15% while the Ministry of Transport expects an increase by 5-15%.

<sup>199</sup> The enforcement authorities in Estonia (Estonian Police and Border Guard Board) indicated that they expect a reduction to the costs by 5-15% while the Ministry of Transport expects an increase by 5-15%.

proposed measure may lead to additional costs for authorities in the range of €18-30 million annually.

**Table 6-51: Summary of impacts from PP1**

Measure	Impact
(3) Allow for spending the regular weekly rest in the vehicle	Minor / very small increase due to additional documentation required and more complex enforcement.
(10) Enhance administrative cooperation	Small increase (up to 6%) due to additional staff needed to respond to requests – depending on the volume of requests.
(16) Define operations of occasional non-professional driver for private purposes and exclude	Minor / negligible increase due to requirements to verify whether drivers are in or out of scope.
Overall impact of PP1	Additional costs to authorities are expected, although these are likely to be limited and mainly relate to additional time/staff requirements for responding to information requests from other Member States.

#### 6.2.2.2. PP2 - Strengthening of enforcement and changes to obligations

Table 6-52 shows the measures in PP2 that are expected to have cost impacts (weighted averages). As noted earlier, these can only be interpreted as indications of the magnitude/importance of these impacts. The most important increases arise from:

- Measures that involve increases in time taken for checks / staffing requirements, in particular: **measure (1)** on changes to weekly rest and **measure (14C)** on the threshold for controlling the WTD.
- Measures that involve changes to IT systems / equipment, in particular **measure (8)** on access to RRS at the roadside. Changes to the RRS formula (**measure (9C)**) and changes to weekly rest (**measure (1)**) also involve software costs, but to a much lesser extent.

**Table 6-52: Weighted average of estimated increase in enforcement costs due to relevant measures in PP2 according to national enforcement and implementing authorities**

Measure	Overall	EU-15	EU-13	Nature of costs affected
(1) Changes to weekly rest	4.3%	6.5%	2.5% <sup>200</sup>	Increase in time taken for checks (indicated by 16 out of 32 respondents, 48% <sup>201</sup> )  Software updates (indicated by 28 out of 33 respondents, 85% <sup>202</sup> )
(2) Forbid spending regular	2.4%	1.8%	2.1% <sup>203</sup>	21 out of 32 respondents (64% <sup>204</sup> ) felt there could be problems – e.g.

<sup>200</sup> The enforcement authorities in Estonia (Estonian Police and Border Guard Board) indicated that they do not expect any impact on costs while the Ministry of Transport do not consider the question relevant

<sup>201</sup> GR, EE, FI, LV, NL, SK felt that this was a “small problem”; BG, CH, DE, ES, FR, IE, IT, LU, PT, SI felt that this was a “major problem”

<sup>202</sup> Only AT, CZ, GR, HR, SK felt that this was “no problem”

<sup>203</sup> The enforcement authority in Estonia (Estonian Police and Border Guard Board) indicated that they do not expect any impact on costs while the Ministry of Transport expect them to increase by more than 15%

Measure	Overall	EU-15	EU-13	Nature of costs affected
weekly rest inside the vehicle				in determining whether drivers had indeed stayed in "adequate accommodation" (AT, IE, SE)
(5) Break may be split into maximum 3 portions of at least 15 minutes each.	1.3%	0.9%	1.9% <sup>205</sup>	Software updates (CH, SL and CY)
(8) Allow controllers to access the RRS in real-time of control	8.0%	11.0%	4.0% <sup>206</sup>	Additional equipment/ software implementation & maintenance (CY, CZ, FR, IT, PT, BE, NO, HU, SK)
(11) Abolish attestation forms	-1.2%	2.8%	-4.0% <sup>207</sup>	Lower administrative burdens when forms do not need to be checked (LT, SE)
(13) Changes to calculation of working time	2.6%	4.4%	3.3%	Software updates (CY, PT, SL) Training (PT)
(9C) Uniform risk-rating formula	3.6%	3.2%	2.2%	Updates to systems / adaptation of existing RRS (CY, FR, HU, LT, NL)
(14C) Threshold for controlling WTD	6.9%	5.7% <sup>208</sup>	8.3%	Additional time/staff and equipment needed for enforcement in existing enforcement (LT, IE, HU, GR, DE, CH)
(15C) Reporting template	7.2%	6.7% <sup>209</sup>	7.5% <sup>210</sup>	Additional human resources needed to meet reporting requirements (DE, FI, GR, UK)

Notes: Red = ≥10% increase, orange = 5-10% increase, white = ±5% change

<sup>204</sup> DE, FI, HU, LU, LV, SK indicated "small problems" and BG, CZ, EE, EE, FR, GR, IE, IT, LT, NL, RO, SE, SI, BE, NO indicated "major problems"

<sup>205</sup> The enforcement authority in Estonia (Estonian Police and Border Guard Board) indicated that they expect enforcement costs to increase by more than 15% while the Ministry of Transport that they will remain the same

<sup>206</sup> The enforcement authority in Estonia (Estonian Police and Border Guard Board) indicated that they expect enforcement costs to remain the same while the Ministry of Transport that they will increase by 5-15%

<sup>207</sup> The enforcement authority in Estonia (Estonian Police and Border Guard Board) indicated that they expect enforcement costs to reduce by 5-15% while the Ministry of Transport that they will remain the same

<sup>208</sup> The Finnish Ministry of Social affairs (responding in coordination with the Transport workers union and the and the employers federation) indicated that they expect enforcement costs to increase by 5-15% while the Ministry of Transport that they will remain the same

<sup>209</sup> The Finnish Ministry of Social affairs (responding in coordination with the Transport workers union and the and the employers federation) indicated that they expect enforcement costs to increase by 5-15% while the Ministry of Transport that they will remain the same

<sup>210</sup> The enforcement authority in Estonia (Estonian Police and Border Guard Board) indicated that they expect enforcement costs to increase by 5-15% while the Ministry of Transport that they will remain the same

*Source: Survey of authorities. 17 respondents from EU-15 and 13 from EU-13. Positive numbers indicate cost increases, negative numbers indicate cost decreases.*

As before, no quantitative estimates of the costs were provided by respondents to the survey. Although a number of measures in PP2 are expected to involve additional costs due to new IT systems and software updates, several respondents<sup>211</sup> to the survey of authorities indicated that it was difficult to give any more precise estimates as to the expected cost. Nevertheless, it may be possible that a single software update could be designed to incorporate all of the required changes, and this would potentially have a lower cost compared to consideration of the measures individually, although as noted earlier the absolute figures are unknown.

Still, there are indications from other sources (see below) that suggest the estimated cost increases are not necessarily going to affect all authorities equally, and may not be significant at all in some cases. Qualitatively, the study visit with the Netherlands enforcer and the interviews were used to help gain more practical insights into the potential cost implications. The findings were as follows, and suggest that the impacts would be varied:

- Regarding **measure (1)**, the study visit hosts did not feel that it would lead to increases in the time taken for checks, and interviewees from Austria felt that there would not be any issues. Interviewees from Romania, Sweden and Belgium indicated that they could not estimate the extent of additional costs but expected costs related to software and training.
- The host suggested that extensions to the RRS under **measure (8)** were not expected to be very costly – the respondent indicated that they had a specific device that was developed internally to give them access to the information and it had not been expensive.

These inputs show that there may be significant variation in the cost impacts for Member States, depending on the systems they currently have in place and how extensive any changes would need to be.

To gain a high level estimate of the potential magnitude of impacts, the estimated costs of similar measures assessed in the context of other studies:

- Similar to **measure (9C)**, changes to risk-rating calculations, along with changes to minimum common data to be included were estimated at a NPV of €11.2 million over 2020-2035 at EU level in the context of the revisions to Regulations 1071/2009 and 1072/2009 (Ricardo et al., 2017). These changes are similar in terms of the changes to calculation of RRS, but also involve changes to databases to incorporate the additional require information, so the estimate is not strictly comparable.
- Similar to **measure (8)** – although clearly not identical - the extension of information in ERRU to roadside officers was assessed in the context of the revisions to Regulations 1071/2009 and 1072/2009 to have a NPV of €6.2 million over the 2020-2035 period (Ricardo et al., 2017).

Table 6-53 summarises the overall impact on costs to authorities. On the basis of the baseline administrative costs, the most important costs should be expected to arise from measures the have an impact on the level of staff required. These should mainly come from measures (14C) and (15C) that are mostly associated with an increase of enforcement staff and, less so, from measure (1). On the basis of the estimates provided, the combined impact of the two measures (18.5% of enforcement costs) could lead to an increase, in comparison to the baseline of costs on an annual basis by up to €92.5 million at EU28 level. However, this estimate should be treated with great caution given that authorities were often unclear about the cost implications of the proposed measures and there are also possible synergies. The impact of other

---

<sup>211</sup> CZ, IT, SL

measures that mainly related to equipment, software or training are expected to be less sizeable.

**Table 6-53: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Additional costs to authorities are expected, although these are likely to be limited and mainly relate to additional time/staff requirements for responding to information requests from other Member States.
(1) Changes to weekly rest	Minor impacts, mainly due to requirement to update software.
(2) Forbid spending regular weekly rest inside the vehicle	Minor impacts, due to more complex enforcement to verify whether accommodation is adequate.
(5) Break may be split into maximum 3 portions of at least 15 minutes each	Very minor / negligible, mainly due to requirement to update software.
(8) Allow controllers to access the RRS in real-time of control	Cost increases indicated due to equipment/software.
(11) Abolish attestation forms	Minor positive impact due to simplified enforcement.
(13) Changes to calculation of working time	Very minor / negligible, mainly due to requirement to update software.
(9C) Uniform risk-rating formula	Small cost increase, mainly due to administrative requirements to update current RRS systems.
(14C) Threshold for controlling WTD	Cost increases indicated due to additional staff requirements – depends on requirements enacted in practice.
(15C) Reporting template	Cost increases indicated due to additional staff requirements.
Overall impact of PP2	Additional costs to authorities are expected. Costs are likely to be related to additional time/staff requirements for enforcement, as well as requirements for new equipment/software.

#### 6.2.2.3. PP3 - Targeted revisions of the social legislation

Table 6-54 shows the weighted average impact of measures in PP3. Overall, the main cost impacts are expected to come from **measure (7)**, but the importance of the cost impacts is expected to be far lower than for measures included in PP2. Most comments received (summarised in the table) refer to increased complexity of enforcement due to additional domestic coach derogations.

**Table 6-54: Weighted average of estimated increase in enforcement costs due to relevant measures in PP3 according to national enforcement and implementing authorities**

Measure	Overall	EU-15	EU-13	Nature of costs affected
(6) Adapt '12-day rule' in international occasional passenger transport by coach	1.4%	3.3%	0.0%	Additional staff time due to more complicated/ time consuming enforcement (CH, NL, SE, BE, NO) New software (CY, PT, SL) Staff training (PT)
(7a) 12 day rule for domestic coach	4.5%	6.5%	2.2%	

Measure	Overall	EU-15	EU-13	Nature of costs affected
(7b) 8 day rule for domestic coach	5.7%	8.0%	2.2% <sup>212</sup>	
(17b) Forbid performance pay	1.9%	0.9%	2.3%	Additional staff time due to complex enforcement / more time spent (CH, NO) Increased referral to courts (LT) Software and training (PT)

Notes: Red = ≥10% increase, orange = 5-10% increase, white = ±5% change

Source: Survey of authorities. 17 respondents from EU-15 and 13 from EU-13. Positive numbers indicate cost increases, negative numbers indicate cost decreases.

Further inputs were sought from authorities via the interviews and study visits regarding the cost implications of **measures (6 and 7)**, but did not provide any concrete estimates. Authorities from Romania and Sweden felt that the proposals would simplify enforcement. Regarding costs, authorities from Romania and Austria did not see significant cost implications, whereas authorities from Sweden and the Netherlands others felt that costs would increase. Overall, the responses seem to indicate that differences in cost impacts could be expected from the proposed measures, depending on the country.

For **measure (17b)**, authorities from Romania and Sweden indicated that they felt there would not be any significant costs, and authorities from Romania and Belgium indicated that any costs would be outweighed by the benefits of simpler enforcement. Conversely, one authority from the Netherlands felt that it would be difficult to enforce this provision at the roadside since they do not have access to payslips. On balance, the qualitative comments seem to support the findings of the survey that indicate very minor cost impacts from this measure.

Table 6-55 summarises the overall impact on costs to authorities. It is difficult to provide an estimate of the additional costs on the basis of the above. Measures (6) and (7) will only apply to a subset of the road transport (international and domestic passenger transport by coach). As a result, the additional time needed by enforcement authorities should be a very small subset of the total estimated annual costs of €300-500 million, according to the baseline. In the case of measure (17b), which has a wider scope, the additional costs may be up to €9.5 million, on the basis of a total 1.9% increase in enforcement staff time. Once more, these estimates should be treated with great caution and can only be considered as indicate of the scale of the impact.

**Table 6-55: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Additional costs to authorities are expected. Costs are likely to be related to additional time/staff requirements for enforcement, as well as requirements for new equipment/software.
(6) Adapt '12-day rule' in international occasional passenger transport by coach	Very minor / negligible cost impacts.
(7) Derogations for domestic coach	Minor impacts, due to more time-consuming enforcement.

<sup>212</sup> The enforcement authority in Estonia (Estonian Police and Border Guard Board) indicated that they proposed is not relevant in terms of enforcement costs while the Ministry of Transport that the enforcement cost will remain the same.

Measure	Impact
(17b) Forbid performance pay	Very minor / negligible cost impacts.
Overall impact of PP3	Cost increases indicated due to more time-consuming enforcement for domestic coach derogations, on top of requirements of PP2.

#### 6.2.2.4. PP4 - Revisions to PWD – horizontal policy option

The relevant measures are summarised in Table 6-56, along with the estimated cost impacts received from the survey of authorities.

**Table 6-56: Weighted average of estimated increase in enforcement costs due to relevant measures in PP3 according to national enforcement and implementing authorities**

Measure	Overall	EU-15	EU-13	Nature of costs affected
(18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD	No estimates			N/A
(19) Two step enforcement	4.3%	3.8%	5.0%	Additional staff time due to resources / time needed (FI, LT, NL) Training (LT)
(20) Record country code in tachograph	2.1%	2.5%	1.7%	Need to verify exact time of entry (DE)

Notes: Red = ≥10% increase, orange = 5-10% increase, white = ±5% change

Source: Survey of authorities. 17 respondents from EU-15 and 13 from EU-13. Positive numbers indicate cost increases, negative numbers indicate cost decreases.

Although the issue of additional costs related to the PP3 measures were investigated with interviewed authorities, as well as in the study visit, respondents indicated that they could not provide any specific comments on the cost implications. Therefore, no further qualitative cross-checking of these estimates was possible.

Nevertheless, regarding the impact of **measure (18)** and its linkages with **measures (19 and 20)**, it is clear that the time-threshold of 5, 7 or 9 days would significantly impact the scope of relevant drivers that fall under the full application of the PWD. Although the number of checks would remain the same (since it is not possible to determine a priori how long a driver has been in the host country), the initiation of the follow-up procedures in the posting Member States via the two-step enforcement should change in proportion to the scope of trips and drivers covered. The scope of drivers covered has previously been calculated (see Section 6.1.1.4 on compliance).

Table 6-57 shows the scope of trips under each threshold in 2035 summed up by posting country. It is compared to the current number of trips that fall within the scope of the respective national legislation. This is zero in the case of Member States with no minimum wage rules (i.e. no national enforcement of posting in the baseline). In Member States with wage rules, enforcement activity is proportionate to the total number of trips in 2035 that take place in the specific country.

As can be seen, at EU-28 level, a decrease in the total number of trips falling within the scope of the new rules for all time thresholds should be expected and, as a result, to the enforcement activity. This is due to the fact that the majority of trips in the EU last less than 5 days and will no longer fall under the scope of the rules. Overall, a 61% reduction in the scope is expected in the case of the 5 day threshold, which is further reduced to 72% for a 7 day threshold and 80% for 9 days.

However, there are important differences among Member States. In the case of Member States that currently apply wage laws in relation to the posting of drivers and perform controls of trips taking place in their territory, there is a significant reduction in the scope since they will now have to make inspections in relation to trips in other Member States if drivers have been posted for a period longer than the threshold set. Thus, on the basis of the data from DTU, for the 8 Member States it is estimated that in the case of a 5 day threshold the number of trips falling within the scope will reduce by, on average, 92%, while in the case of 9 days by 96%.

In contrast, for Member States that do not currently apply wage laws –the two step enforcement will lead to an increase in the scope relevant to the level of posting. Furthermore, as expected, the 9 day threshold leads to a lower number of trips within the scope of the two-step enforcement: around 50% less than the 5 day threshold.

**Table 6-57: Expected change in the scope of trips subject to PWD under different time threshold options on the basis of the Member state (thousand trips covered on the basis of data from 10 hosting Member States<sup>213</sup> – Data for 2035)- Number of trips adjusted for changes to total transport activity**

	Baseline (number of trips summed up by host country within scope of current rules) [1,000 trips]	PP4 (number of trips summed up by posting country within scope of two step enforcement) [1,000 trips]		
		5 day threshold	7 day threshold	9 day threshold
MS that apply wage laws to posted drivers				
AT	2,556	265	178	119
BE	6,670	501	340	237
DE	14,519	1,532	1,081	740
DK	n/d	n/d	n/d	n/d
FR	8,910	209	133	98
IT	n/d	n/d	n/d	n/d
LU	n/d	n/d	n/d	n/d
SE	1,013	20	13	9
Total (% change)	33,668	2,527 (-92%)	1,745 (-95%)	1,203 (-96%)
MS that do not apply wage laws to posted drivers				
BG	0	199	147	103
CY	0	0	0	0
CZ	0	1068	784	589
EE	0	48	34	24
EL	0	0	0	0
ES	0	645	394	292
FI	0	73	50	33
HR	0	49	35	25

<sup>213</sup> AT, BE, BG, DE, ES, FR, NL, PL, RO, SE

	Baseline (number of trips summed up by host country within scope of current rules) [1,000 trips]	PP4 (number of trips summed up by posting country within scope of two step enforcement) [1,000 trips]		
		5 day threshold	7 day threshold	9 day threshold
HU	0	625	458	337
IE	0	4	2	2
LT	0	221	149	105
LV	0	1093	757	577
MT	0	107	76	55
NL	0	0	0	0
PL	0	2619	1908	1350
PT	0	2681	1993	1402
RO	0	405	291	201
SI	0	344	235	188
SK	0	497	372	274
UK	0	38	24	17
<b>Total</b>	<b>0</b>	<b>10,716</b>	<b>7,709</b>	<b>5,574</b>
<b>Total EU28 (% change)</b>	<b>33,668</b>	<b>13,243 (-61%)</b>	<b>9,454 (-72%)</b>	<b>6,777 (-80%)</b>

Specific data on the current costs of enforcement or the expected duration of the checks as part of the two-step enforcement are not available. As a result it is not possible to quantify the impact on enforcement costs for authorities. Nonetheless, given the sizeable reduction in the scope at EU-28 level, an overall reduction to the total enforcement activity should be expected. However, the significant reduction applies only to Member States with minimum wage rules in the baseline. All other Member States should experience an important increase in the enforcement activity that should be largely proportional to the level of posting originating from each Member State.

Table 6-58: Summary of impacts from PP4 summarises the overall impact on costs to authorities from PP4.

**Table 6-58: Summary of impacts from PP4**

Measure	Impact
(18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD and (19) Two step enforcement	Significant decrease in the scope for the Member States with existing minimum wage rules that should also lead to reduced enforcement costs. Smaller (in absolute terms) increase for all other Member States. Overall decrease at EU-28 level, which is higher in the case of 9 days threshold (-78%) and less for 7 (-70%) or 5 days (-58%).
(20) Record country code in tachograph	Negligible costs for enforcers.
Overall impact of PP4	Overall decrease in the scope and, most probably, costs of enforcement but with different impact in Member States with and without existing minimum wage rules.

### 6.2.1. *Impact on SMEs*

#### 6.2.1.1.PP1 – Clarification of the legal framework & improve cooperation

The following measures were identified as potentially having relevant impacts on SMEs compared to larger firms:

- (3) Allow for spending a regular weekly rest in the vehicle, provided that it is the free choice of a driver or it is justified by the circumstances, such as lack of resting facilities.
- (4) Clarify that breaks, resting and driving time arrangements may be adapted to address specific exceptional circumstances under which transport operation is carried out and/or to enable reaching home/base.
- (16) Define operations of occasional non-professional driver for private purposes and exclude them from the scope of the Regulation 561/2006 (17a) Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried).

Regarding **measure (3)** - allowing drivers to spend a regular weekly rest in the vehicle provided that it is the free choice of the driver or justified by the circumstances - SMEs would benefit more – in relative terms - from an increase in flexibility when operating in countries that currently forbid weekly rest in the vehicle (e.g. France and Belgium) as they are less able to manage drivers schedules to work around such restrictions, and may also benefit from avoiding fines when accommodation is not available. Additionally, SMEs who cannot afford legal advice may benefit from a more consistent legal framework.

**Measure (4)** - clarification that breaks, resting and driving time arrangements may be adapted to address specific exceptional circumstances - may also be a benefit SMEs who are less able to cover additional administrative costs or procure legal advice on the different regulatory regimes across the EU.

**Measure (16)** - - defining operations of occasional non-professional driver for private purposes and exclude them from the scope of the Regulation 561/2006– is not expected to be relevant to SMEs as they do not carry out operations for private purposes.

**Measure (17a)** - allowing Member States to forbid on their territories all performance based payment - may increase administrative costs for SMEs who are unable to procure legal advice on different regulatory regimes across the EU.

**Table 6-59: Summary of impacts from PP1**

Measure	Impact
(3) Allow for spending a regular weekly rest in the vehicle, provided that it is the free choice of the driver or is justified by other circumstances	Additional flexibility for SMEs in countries that currently forbid spending weekly rest in the vehicle.
(4) Clarify that breaks, resting and driving time arrangements may be adapted to address specific external circumstances under which transport operations are carried out	Positive impact on SMEs from reduced costs of understanding national rules.
(16) Define occasional driver and operations for private purposes excluded from the scope of the Regulation 561/2006	No impact.
(17a) Allow Member States to forbid (on their territories) all	Possible negative impact from further administrative

Measure	Impact
performance based payment (based on distances travelled / amount of goods carried)	burden of understanding national rules.
Overall impact of PP1	Small negative impacts from increased administrative burden and different rules across EU on performance based pay counterbalanced by increased flexibility from allowing spending weekly rest in vehicle.

#### **6.2.1.2. PP2 - Strengthening of enforcement and changes to obligations**

The following measures were identified as potentially having relevant impacts on SMEs compared to larger firms:

- Measures of PP1.
- (1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks.
- (2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'.
- (5) For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged.
- (11) Abolish attestation forms on top or instead of tachograph records.
- (13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks.

**Measure (1)** - calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks – should, in principle, be beneficial for SMEs by increasing flexibility of operations and making compliance easier.

Among respondents to the survey of operators, there is no evidence of disproportionate impact on SMEs. 21 out of 34 (62%) operators with less than 50 employees indicated that there should be an increase in the operating costs as a result of the proposed measure. However, an even higher share - 34 out of 36 (92%) of operators with more than 50 employees - indicated an increase in costs.

During interviews conducted for this study, representatives of SMEs at EU level (UETR and UEAPME) argued that this measure would make time management more difficult for self-employed drivers and for micro-firms who do not have or cannot afford to invest in time management software. However, in the absence of more specific evidence provided by the associations it is not clear what additional difficulties may arise for SMEs, beyond those that they already face. Undertakings interviewed from Bulgaria, Hungary were also not in favour of the changes due to perceived negative impact on flexibility although another one from the Czech Republic expected that the measure would bring increased flexibility.

Overall, there is no strong evidence of additional costs for smaller firms as a direct result of the measure which should, in principle, help simplify the calculations and monitoring required.

**Measure (2)** forbidding that regular weekly rest be taken in the vehicle should not lead to higher – in relative terms – costs for SMEs. In general, any impact on operating costs per trip or per driver will apply equally to small and large firms. Still,

the Spanish industry association (ASTIC) suggested that there may be a greater impact on compliance costs for self-employed drivers as they do not receive an accommodation allowance that hauliers provide to their drivers. Furthermore, as was pointed out, self-employed drivers and small SMEs may experience problems with leaving their vehicle given the risk of theft which they would be liable for. However, such a risk also applies to larger firms.

The responses to the data requests from operators did not provide any additional light in that respect. Among firms with less than 10 employees who responded to the survey of operators, 4 out of 10 (40%) indicated they would always have to go home. Regarding the option of providing accommodation paid for by the firm, 3 respondents did not know, 2 respondents indicated never, while rarely (<25%), often (25-50%), very often (>75%) and always were each indicated by 1 respondent, suggesting a very mixed opinion regarding this point. The larger firms were part of a coordinated response from Hungarian undertakings, which, combined with the small sample size, makes it difficult to draw solid conclusions from these results.

Overall, there is limited evidence that the proposed measure would have a greater impact on SMEs in comparison to larger firms.

**Measure (5)** - Allowing a break of minimum 45 minutes to be split into a maximum of 3 portions of at least 15 minutes each - would positively benefit SMEs by increasing flexibility, but not disproportionately so compared to larger firms.

**Measure (11)** - Abolishing attestation forms on top or instead of tachograph records – may have a positive benefit on SMEs by reducing administrative burdens (see Section 6.1.2.2 on costs to businesses), although limited as attestation forms are not generally used (Ricardo et al, 2016). Among operators that responded to data request, 12 out of 23 (52%) with less than 50 employees indicated that they do not submit any attestation forms, compared to 30 out of 33 (91%) operators with greater than 50 employees, which suggest that, in relative terms, smaller firms make greater use of attestation forms. Overall, to the extent that SMEs make greater use of attestation forms, they may benefit more from the time savings arising from the proposed measure.

**Measure (13)** - Reducing the reference period used for a calculation of the maximum average working time (of 48 hours) from 4 months (or 6 months according to national law) to 4 weeks – would impact transport operations that are characterised by seasonal fluctuations (see Section 6.2.1.2). SMEs would probably be affected as they have a smaller number of drivers to distribute work to during periods of high demand. During the interviews conducted for this study, UETR and UEAPME both agreed that this measure would have a negative impact on SMEs as a result of the above reasons. Overall, this measure is expected to have a negative impact on SMEs relative to larger firms.

**Table 6-60: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Negative impacts from increased administrative burden which would disproportionately affect SMEs. Small positive impacts from clarity of driving time adaptations and definition of occasional drivers.
(1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks	No disproportionate costs for SMEs but expected greater difficulties to plan and monitor drivers schedules.
(2) Forbid spending the regular weekly rest of over 45 hrs in the vehicle and oblige employer to either provide or pay for adequate	No/very limited evidence of higher relative costs for SMEs.

Measure	Impact
accommodation	
(5) For all drivers: a break of minimum 45 minutes may be split into maximum 3 portions of at least 15 minutes each. Basic provision on breaks remains unchanged	Small positive impact on SMEs from increased flexibility, but not disproportionately so.
(11) Abolish attestation forms on top or instead of tachograph records	Small positive impact on SMEs from reduced administrative burden depending on the alternative approach used to record time away from the vehicle.
(13) Reduce the reference period used for a calculation of the maximum average weekly working time (of 48h) from 4 months (or 6 months according to national law) to 4 weeks	Negative impact on flexibility which would affect SMEs and self-employed drivers.
Overall impact of PP2	Negative impact from measures under PP1 and reduced working time reference period, partly offset by small positive impacts from increase in flexibility from break time changes and attestation forms.

#### 6.2.1.3. PP3 - Targeted revisions of the social legislation

The following measures were identified as potentially having relevant impacts on SMEs compared to larger firms:

- Measures of PP2.
- (6) Adapt '12-day rule' in international occasional passenger transport by coach by abolishing obligation of take two regular weekly rest periods after the use of derogation or one regular and one reduced weekly rest, with a compensation. Instead introduce the obligation to take one regular and one reduced weekly rest (minimum 69 hours), to be taken en bloc, without obligatory compensation for the reduced rest.
- (7) Allow for flexibility for domestic occasional transport of passengers by coach (a) '12-day rule' – allowing to postpone weekly rest for up to 12 periods of 24 h, provided that a driver takes regular weekly rest of minimum 45 h before and 69 h after the use of the derogation and (b) '8-day rule' – allowing postpone weekly rest for up to 8 periods of 24 h provided that a driver takes regular weekly rest of minimum 45 h before and after the use of the derogation.
- (17b) Forbid all performance based payment (based on distances travelled / amount of goods carried).

**Measures (6) -** adapting the 12-day rule in international occasional passenger transport by coach – **and (7) -** allowing for flexibility for domestic occasional transport of passengers by coach - are expected to have a positive impact on SMEs through increased flexibility, who may not have the option to use two drivers for such operations that is available to larger firms.

**Measure (17b) -** forbidding all performance based payment (based on distances travelled/amount of goods carried) - may reduce administrative costs for SMEs more than for larger firms, by creating a harmonised rule for all Member States and removing the need for SMEs to procure legal advice.

**Table 6-61: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Negative impact from measures under PP1 and reduced from flexibility from reduced working time reference period, partly offset by small positive impacts from increase in flexibility from break time changes and attestation forms.
(6) Adapt '12-day rule' in international occasional passenger transport by coach	Small positive impact on flexibility for SMEs.
(7 a and b) Allow for flexibility for domestic occasional transport of passengers by coach	Small positive impact on flexibility for SMEs.
(17b) Forbid all performance based payment (based on distances travelled / amount of goods carried)	Possible positive impact on social conditions, but concerns over definition of performance based payment in relation to self-employed drivers.
Overall impact of PP3	Neutral. Small negative impact from PP2 offset from small positive impact from flexibility for passenger transport and forbidding of performance-based pay.

#### **6.2.1.4. PP4 - Revisions to PWD – horizontal policy option**

The following measures were identified as potentially having relevant impacts on SMEs compared to larger firms:

- (18) Set time-thresholds (measured as the number of days and nights spent in a host Member State over a month).
- (19) Introduce a two-step enforcement process, where the first step is the roadside check carried out by the controllers on the territory of the 'host' Member State and the second step is the check at the premises of a company (driver's employer) by the enforcement authorities of the country of establishment of that company.
- (20) Oblige the driver to record in the tachograph the country code of the country where they are, each time they stop the vehicle.

**Measures (18) and (19)** – setting time-thresholds for the full application of the posting rules (measured as the number of days and nights spent in a host Member State over a month) and a sector-specific administrative requirements and a two-step enforcement process– should be expected to benefit SMEs on the basis of the significant reduction to both administrative and compliance costs (see Section 6.2.1.4). Reduction in administrative costs in particular can have a greater impact on SMEs which have reduced capacity to monitor and implement national regulations.

However, the industry representative took a more negative view of the proposed measures. During interviews conducted for this study, UETR, UEAPME and EuroExpress, an industry association representing couriers, commented that these requirements would result in additional administrative burden for SMEs to record time spent in different countries, and also understand each Member State's national laws. UEAPME suggested that the costs for SMEs to understand national provisions can be very high. The SME panel survey responses also provide some additional support with 20 out of 50 (40%) of respondents to the SME panel survey thought that any benefits would not outweigh the costs, while a further 18 (36%) did not know.

However, we should note that such comments do not properly reflect the fact that monitoring time spent in another Member State is already an obligation of operators according to the current provisions of the PWD. Thus, the input provided seems to be

from the point of view of firms that did not have to comply with any requirements concerning the posting of workers in the past. It is not in line with the analysis of the administrative costs that arise as a result of the introduction of minimum wage rules in a number of high cost countries. The analysis presented in Section 6.2.1.4 clearly suggests that, in balance, administrative costs would reduce, representing a significant benefit for SMEs.

The only aspect where SMEs may not be able to benefit as much as larger firms is related to the thresholds set above which minimum wage requirements may apply. Larger firms should be able to benefit more than SMEs by managing their drivers' itineraries so that each driver stays below the time threshold in a given Member State and thus higher wages do not apply. Self-employed drivers or micro-firms with a few drivers do not have such flexibilities and, thus, can be at a relative disadvantage. However, the number of operations affected would be rather limited - particularly in the case of a 9 day threshold (see also 6.2.1.4). As a result, the number of SMEs affected should also be very limited.

Overall, measures (18) and (19) will have a positive impact on SMEs, particularly by reducing the administrative costs for the majority of operations. Some SMEs with no previous experience in applying the PWD rules may be negatively affected. However, the costs implication – in comparison to large firms – should not be significant.

Finally, **Measure (20)** is not expected to have a disproportionate impact on SMEs compared to larger firms since the same obligation would apply to every driver, thus in proportion to the size of the firm.

**Table 6-62: Summary of impacts from PP4**

Measure	Impact
(18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD and (19) Two step enforcement	Positive impact on most SMEs by reducing the administrative costs for the majority of operations.
(20) Oblige the driver to record in the tachograph the country code of the country where they are, each time they stop the vehicle.	No specific impact on SMEs.
Overall impact of PP4	Positive impact for most SMEs by reducing the administrative costs for the majority of operations.

### 6.2.2. Impact on functioning of the internal market and competition

Overall, the proposed intervention should be expected to have a positive impact on functioning of the internal market and competition, by addressing the existing regulatory – as identified in problem definition -and, as a result, contributing to an improved function of the market and a level playing field. More specifically, the measures under consideration should have an impact on the operation of the internal market and the level and nature of competition through the following mechanisms:

- *Clarification of rules to avoid diverging interpretations* and make enforcement more uniform and consistent across different Member States.
- *Measures improving enforcement effectiveness* that should contribute to higher levels of compliance with social rules across the EU, limiting dubious/illicit business and employment schemes and ensuring a more level playing field.

- *Measures affecting access to the transport market that can have an impact on the level and competition This is particularly related to provision concerning posting of workers that may have an impact on costs of operations when operating over a certain a period in a host Member State and potentially create barriers to entry .*

#### **6.2.2.1. PP1 – Clarification of the legal framework & improve cooperation**

Measures included in **policy package 1** should only be expected to have a limited role to the functioning of the internal market and competition. As analysed in Section 6.1.1.1, measures under PP1 are expected to have a limited role in terms of improving clarity and effectiveness of enforcement practices as well as consistency across different MS. In these terms, specific measures within PP1 are associated to limited positive impact for different reasons:

- **Voluntary measures on improving cooperation (i.e. (9V), (14V), and (15V))** are expected to have a very limited positive impact on improving the consistency of enforcement practices across different Member States so as to ensure fair competition. On the other hand, mandatory **measure (10)** on the maximum period for exchange of information may have a more positive indirect impact to the extent that it contributes to more effective exchange of information that can facilitate enforcement across the EU, including in relation to operators involved in complex supply chains (see Section 6.1.1.1).
- **Measures (3), (4), (12), (16) on improving the clarity of the current road social legislation.** Drawing on the analysis of impact on compliance (see Section 6.1.1.1), measures (4), (12a) and (16) are expected to increased clarity and thus a more consistent approach in enforcing and complying with social rules. This should contribute to a level playing field and better operation of the internal market.
- Measure (3) should also help towards a more consistent legal framework across the EU but only if the clear definitions around “free choice” are in place. In contrast, measure (12b) would not contribute towards increased clarity of the rules and thus will not have a positive contribution to the better functioning of the internal market.
- **Measure (17a)** - Allow Member States to forbid (on their territories) all performance based payment (based on distances travelled / amount of goods carried). Due to its voluntary nature, measure (17a) is expected to allow for an inconsistent approach to develop across EU Member States with the use of performance based schemes being banned in some national markets but not in others. Unless all Member States adopt similar measures, such a measure would not contribute towards the development of a level playing field and may even contribute to unfair competition.

**Table 6-63: Summary of impacts from PP1**

Measure	Impact
Measures on improving cooperation between Member States (i.e. (9V), (14V), (15V))	Very limited positive impact on improving consistency of enforcement practices so to ensure fair competition.
(10) Enhance administrative cooperation	Indirect positive impact on improving the effectiveness of enforcement across different member states, and benefit operators involved in complex supply chains.
Measures on improving the clarity of the current road social legislation (i.e. (4), (12a), (16))	Positive impact on contributing to a level playing field and better operation of the internal market.
Measures on improving the	Limited negative impact on better functioning of the internal

Measure	Impact
clarity of the current road social legislation (i.e. (3), (12b))	market due to lack of clarity and consequent inconsistency in enforcement practices.
(17a) Allow Member States to forbid (on their territories) all performance based payment	Limited negative impact not towards the development of a level playing field and may even contribute to unfair competition.
Overall impact of PP1	Limited positive impact on improving the functioning of the internal market and fairer competition between operators.

#### 6.2.2.2. PP2 - Strengthening of enforcement and changes to obligations

Overall, **policy package 2** is expected to have a small positive impact on addressing the identified regulatory failure which leads to unfair competition between undertakings across different Member States. Indeed most measures within policy package 2 (i.e. **(8), (11), (9C), (14C), (15C)**), as analysed in section 6.1.1.2 on compliance, are expected to significantly **improve the effectiveness and consistency of enforcement practices** across different Member States with expected positive impacts on the levels of compliance with social rules (driving/rest time or overall working time), strengthening the functioning of the internal market and ensuring fair competition.

Similarly, **measure (1)** – on calculating average regular weekly rest time over a 4 weeks period– may also have a small positive impact by improving effectiveness and consistency of enforcement and level of compliance. Finally, **measure (2)** – forbidding taking the weekly rest in the vehicle - should ensure a consistent application of the rule across the EU contributing to a more level playing field. However, unless 'adequate accommodation' is properly defined and enforced, differences in standards of accommodation may actually contribute to unfair competition between transport undertakings in different Member States.

**Table 6-64: Summary of impacts from PP2**

Measure	Impact
Measures of PP1	Limited positive impact on improving the functioning of the internal market and fairer competition between operators.
(1) Calculating the required regular weekly rest period of 45 hours as a minimum average resting time over a reference period of rolling 4 weeks	Minor positive impact on addressing regulatory failure due to small improvement of enforcement practices.
(2) The weekly rest of 45 hours and more must not be taken in the vehicle. It should be taken either at the suitable accommodation provided/paid by the employer, or at the home base or at another private place of rest. Include a definition of 'adequate accommodation'	Uncertain impact due to on one and improved consistency of enforcement, though on the other hand, lack of clarity of the rule which may lead to unfair competition.
Measures on improving effectiveness and consistency of enforcing practices (i.e.	Positive impact due to the improved effectiveness and consistency of enforcement across different Member States which results in a stronger functioning of the internal market

Measure	Impact
(8), (11), (9C), (14C), (15C))	and ensuring fair competition.
Overall impact of PP2	Positive impact addressing the identified regulatory failure and contribute tackling unfair competition between undertakings across different Member States.

#### 6.2.2.3. PP3 - Targeted revisions of the social legislation

In general, measures in **policy package 3** should be expected to have a positive additional contribution towards the functioning of the internal market and promoting fair competition.

**Measure (6)** is expected to have a minor positive impact as a result of the simplification of the rules and increased flexibility in the provision of international passengers transport operations. However, any impact of the proposed change would be rather marginal.

**Measures (7a and 7b)** would increase flexibility for undertakings involved in domestic occasional transport of passengers by coach, reducing costs for operators and thus, potentially attracting more firms in such operations and contributing towards increased competition in such markets.

**Measure (17b)** - on forbidding all performance based payment – thanks to its compulsory nature, is expected to have a significant impact on improving clarity and effectiveness and consistency across different Member States. Given that performance-based payments (often illegal) are still common – particularly in EU-13 - the proposed measure should help eliminate illicit/dubious business and employment models that are in breach of the social rules. It should, as a result, contribute towards a level playing field and fair competition.

**Table 6-65: Summary of impacts from PP3**

Measure	Impact
Measures of PP2	Minor positive impact in terms of addressing the identified regulatory failure and contribute tackling unfair competition between undertakings across different Member States.
(6) Adapt '12-day rule' in international occasional passenger transport by coach	Minor positive impact as a result of the simplification of the rules and increased flexibility in the provision of international passengers transport operations.
(7) Allow for flexibility for domestic occasional transport of passengers by coach: a) 12-day rule; b) 8-day rule;	Positive impact on increasing access to the market (i.e. domestic occasional passengers transport) and consequent competition thanks to increase in flexibility of operations.
(17b) Forbidding all performance based payment (based on distances travelled / amount of goods carried)	Positive impact on level playing field and fair competition as a result of reduced illicit/dubious business and employment models.
Overall impact of PP3	Positive impact on functioning of internal market and fair competition by a range of measures that, put, together, reduce non-compliance and use of illicit/dubious business and employment models.

#### 6.2.2.4. PP4 - Revisions to PWD – horizontal policy option

Overall, **policy package 4**, which introduces a more coherent and consistent interpretation and application of posting of workers rules in transport, is expected to have an important impact on the functioning of internal market and on competition.

**Measure (18)** is particularly relevant in this regard, in the context of the adoption by

some Member States (e.g. Germany, France, Italy and Austria) of national legislation that set requirements on minimum wage and other employment benefits according to the rules of the Member States but also additional and rather demanding requirements of administrative nature.

The views of stakeholders as to the extent that the existing additional requirements constitute to fair competition vary greatly. Around half (31 out of 57) of the respondents to the SME panel survey agreed that the application of the posting of workers rules contribute to fair competition while 24 disagreed. Among respondents to the open public consultation, 60% disagree and somewhat disagree<sup>214</sup> that EU provisions on posting of workers contribute to ensuring fair competition between operators in the EU. Similarly, the interviews with industry stakeholders and national authorities also point to a clear divide between high cost (EU-15) Member States which consider that the proposed measures protect against social dumping and ensure that all operators compete under the same basis in each national market. On the other hand, EU13 industry representatives take the view that the existing rules introduce disproportionate costs and effectively represent barriers to entry to the specific markets for lower cost operators. Our own analysis (see section 5.3.5.2) shows that the administrative costs arising – including the requirements for translation but also, in the case of France, of a permanent representative – are significant and arguably disproportionate.

In that respect, **measures (18) and (19)** – which provide that minimum wage rules apply to all EU28 after a certain period (18) and significantly reduce the administrative costs related to posting (19) – should be expected to have a positive contribution to the operation of the internal market while ensuring fair competition across the EU28.

Undertakings conducting operations in 'host' countries currently applying minimum wage rules would benefit from reduced compliance and administrative costs, thus easing access to these markets and strengthening existing levels of competition. In the countries with no existing provisions (mainly lower cost countries), the adoption of measures would – most often – not introduce additional compliance costs since the wage levels are similar. More importantly though, given that this rules will apply to all operators it should not create unfair advantage.

Overall, in principle the proposed measures should have a positive contribution to the operation of the internal market and fair competition.

At the same time though, the analysis of the impact on compliance of **measures (19) and (20)** (see Section 6.1.1.4) raises questions about the expected effectiveness of enforcement and, consequently, on ensuring compliance with the proposed rules. As a result, while increased clarity and EU wide application of rules should have a positive contribution to the operational of the internal market they are also significant questions around the actual capacity to ensure a level playing field among operators in different Member States.

**Table 6-66: Summary of impacts from PP4**

Measure	Impact
(18) Set time-thresholds (5, 7 or 9 total accumulated days per month) below which drivers would not fall under the full application of the PWD	Positive impact on contributing to the operation of the internal market and fair competition through the adoption of common rules across the EU-28.
Measures on enforcing revised PWD rules (i.e. (19) and (20))	Unclear impact on ensuring a level playing field among operators due to significant questions on effectiveness of enforcement and compliance.

<sup>214</sup> Results of the non-specialised questionnaire to question 17: 509 out of 1102 responded 'don't agree' and 152 out of 1102 responded 'somewhat disagree'

Measure	Impact
Overall impact of PP4	Uncertain impact on ensuring a level playing field and on helping addressing regulatory failure

## 7. COMPARISON OF OPTIONS

### 7.1. Effectiveness and efficiency

The effectiveness of the options is examined against the policy objectives identified in section 2. The criteria presented below are used to help assess effectiveness. Given that regulatory costs are also part of the policy objectives, the efficiency of the policy packages is also considered in parallel.

**Table 7-1: Objectives and assessment criteria related to the effectiveness of policy options**

General objectives	Specific objectives	Assessment criteria
<ul style="list-style-type: none"> <li>• Ensure a level playing field for drivers and operators</li> <li>• Improve and harmonise working conditions for drivers</li> <li>• Improve the road safety level</li> </ul>	Contribute to the higher compliance with the existing rules	<ul style="list-style-type: none"> <li>• Expected improvement of the compliance level</li> <li>• Expected reduction in distortions of competition</li> </ul>
	Contribute to the reduction of the regulatory burden to businesses and Member States	<ul style="list-style-type: none"> <li>• Changes to compliance and administrative costs for businesses</li> <li>• Changes to costs for authorities for implementation and enforcement</li> </ul>
	Contribute to reduction of stress and fatigue of drivers	<ul style="list-style-type: none"> <li>• Expected improvements in length of periods away from home</li> <li>• Expected improvement of driver's fatigue levels</li> <li>• Expected improvement of driver's work-life balance</li> <li>• Expected improvement of road safety and occupational health</li> </ul>

In addition, in the context of the applicability of the provisions on posting of workers, the policy packages should also be assessed against the criterion of:

- Balance between social protection of workers and freedom to provide cross-border services, due to the cross-cutting goal of the legal framework.

The results of the analysis of impacts are summarised in Table 7-2.

**Table 7-2: Comparison of impacts of policy packages in terms of objectives (in comparison to baseline)**

Strongly negative		Weakly negative		No or limited impact	Weakly positive	Strongly positive
	Traditional social measures					Posting of workers
Impacts	PP1	PP2	PP3	PP4 (5/7/9 days threshold)		
Effectiveness						
Contribute to higher compliance with the existing rules						
Expected improvement of the compliance level with EU social rules	Very limited positive impact on levels of compliance on the basis of increased clarity and some improvements of enforcement.	Small increase in compliance levels as a result of the overall improvement of enforcement and increased clarity of legal framework from proposed measures.	Positive impact from PP2 measures further strengthened by positive role of forbidding performance based payments and simplification of 12-day derogation for international transport.	Unclear impact. Positive impact from significant simplification of rules/procedures. Significant questions on capacity to effectively monitor period spent in a host country and enforce compliance – higher threshold 9 less demanding due to reduced scope.		
Contribute to reduction of stress and fatigue of drivers						
Expected improvements in length of periods away from home	No or Small negative impact (increase) on periods away from home by allowing spending regular rest in vehicles in some Member States.	Significant positive impact on periods spent away from home – 43% increase to the number of drivers that spend weekly rest at home for EU13 drivers and 16% for EU15.	Positive impact for most drivers due to measures of PP2. Some negative impact for coach drivers from adopting 8/12 day derogation of domestic passenger transport.	Some increase in periods away from home for drivers from EU13 (lower cost countries) due to reduction of costs for posting and threshold periods. Very small increase in average period away from with increasing threshold from 5 to 7 and 9 days.		
Expected improvement of driver's fatigue and stress levels	Positive impact due to reduction of stress (clearer rules, more possibility to reach home base and higher minimum standards of accommodation).	Decreases in fatigue levels (-30%) over 4 week period from combined changes to calculation of average weekly rest and average working time. Longer term decrease of 14-16% from change in calculation of average working time Improvements in stress and fatigue due to clearer legal framework, higher standard of accommodation that is also paid for, and improved possibilities to spend rest at home/base.	Decreases in fatigue of up to (-30%) for drivers in freight from PP2 but overall expected increase in fatigue index of 8% for international coach drivers, and of 20 to 33% for domestic coach drivers as a result of the proposed derogations.	Negative impact on fatigue and stress due to increase in periods away from home.		
Expected improvement of road safety and occupational health	Small positive impacts on fatigue due to more responsible driving and possibility to reach home.	Significant positive impact on risk index due to combined effect of measures concerning calculation	Slight positive additional impact for freight drivers due to lower incentives from performance-based	Minor and indirect negative impact due to small increase in fatigue.		

Impacts	Traditional social measures			Posting of workers
	PP1	PP2	PP3	PP4 (5/7/9 days threshold)
	base in case of exceptional circumstances.	average weekly rest and reference period for working time (decrease by 24%) with additional positive impact from measures on expected from forbid spending the regular weekly rest in the vehicle and oblige employer to either provide or pay for adequate accommodation and changes to breaks.	pay to break rules. Increase in risk – in comparison to PP2 - of 4% for international passenger transport coach drivers and 4-5% for domestic coach drivers subject to the derogations.	
<b>Expected improvement in working conditions</b>	Small positive impact due to reductions in fatigue/stress.	Significant positive impacts due to significant reductions in fatigue/stress and reductions in periods away from home.	Strong positive impacts due to reductions in fatigue and periods away from home, although these are lower for affected coach drivers and – potentially – where drivers suffer from lower wages if they are not compensated for changes to performance-based payment rules.	Small negative impacts overall due to increases in periods away from home and possible. Reductions in wages compared to the baseline for EU-13 drivers operating in the countries that previously had minimum wage laws.
<b>Impact on employment and levels and types of work contract</b>	Minor positive impact due to improved working conditions.	Overall positive impact on levels of employment due to expected major increases in supply of drivers (more attractive) with only minor increase in demand.	Positive impact from measures of PP2 are only partly counterbalanced by negative impacts for coach drivers affected by the measures.	Overall, uncertain impact due to diverging type of impacts on both demand and supply side.
<b>Efficiency</b>				
<b>Reduce administrative burdens for national authorities and transport undertakings</b>				
<b>Compliance and administrative costs for businesses</b>	Very limited net impact expected	Small additional costs expected for operators that allow or promote spending weekly rest on vehicles and administrative costs from additional working time checks and reduced flexibility from 4 week reference period.	Additional costs from PP2 measures counterbalanced for passenger transport operators from derogations sector.	Significant reductions in administrative and compliance costs. Reductions in compliance costs range from 58% (5 day threshold) to 79% (9 day threshold). Reductions in administrative costs across the EU are 53%.
<b>Costs for authorities for implementation and enforcement</b>	Limited additional costs mainly relate to additional time/staff requirements for responding to information requests from other Member States in relation to enhanced administrative cooperation.	Additional costs to authorities related to additional time/staff requirements for increased number of working time checks and reporting templated and requirements for new equipment/software for access to risk rating system.	Cost increases – in addition to PP2 - due to more time-consuming enforcement for domestic coach derogations.	Overall decrease in the scope and, most probably, costs of enforcement but with different impact in Member States with and without existing minimum wage rules.

In the case of **Policy Package 1**, a positive contribution should be expected in relation to the drivers' fatigue and stress, as well as occupational health and safety due to expected higher standard of accommodation and the increased possibility to reach home. However, only limited impacts are expected on the level of compliance with the rules due to increased clarity and some improvements in enforcement. The voluntary nature of the other measures is expected to limit their effectiveness. From the point of view of costs, there are no significant impacts expected for either businesses or authorities. Overall, while PP1 has limited costs, the voluntary nature of most measures means that it also has limited effectiveness.

In the case of **Policy Package 2**, a strong positive contribution is expected in relation to the level of stress and fatigue of drivers as a result of reductions to the periods spent away from home (expected 43% reduction for EU-13 and 16% for EU-15), together with a decrease in fatigue levels (decrease in the fatigue index of 30%). Similarly, a significant positive impact on the level of risk is expected (decrease of 24% in the risk index). At the same time, the measures under PP2 are expected to lead to some improvement in compliance with the legislation, as a result of the overall improvement of enforcement through and increased clarity of legal framework from proposed measures.

While difficult to quantify, the cost implications for operators are expected to be small - mainly linked to the provision of accommodation, additional working time checks and reduced flexibility from the 4 week reference period.

Additional costs to authorities are also expected to be limited - mainly related to additional time/staff requirements for increased number of working time checks and reporting templated and requirements for new equipment/software for access to risk-rating systems.

In the case of **Policy Package 3**, a stronger positive impact on levels of compliance is expected compared to PP2 due to the forbidding of performance based payments and simplification of the 12-day derogation for international transport. However, in terms of levels of stress and fatigue, PP3 is expected to have less positive impacts than PP2. Adopting an 8 or 12 day derogation for domestic passenger transport is expected to have negative impacts on affected drivers in terms of increased periods away from home, fatigue and risk. The above should also lead to slightly less positive overall impacts of PP3 in terms of working conditions for passenger transport, but also a less positive impact on the supply of drivers and on employment levels. In terms of costs of the proposed measures, the derogations should be expected to reduce the costs to some operators in comparison to PP2. From the point of view of authorities, the costs should be slightly higher than in PP2 due to more time-consuming enforcement for domestic coach derogations.

Overall, PP3 appears to be less effective in comparison to PP2, while it is expected to have largely similar costs.

Finally, concerning **Policy Package 4 (a/b/c)**, increases in periods away from home for drivers from EU-13 (lower cost countries) should be expected due to the reduction in costs for posting. This should also have a negative impact on fatigue and to a lesser extent on road safety. A small negative impact on working conditions is also expected due to increases in periods away from home and possible reductions in wages compared to the baseline for EU-13 drivers operating in the countries that previously had minimum wage laws. Among the three scenarios, a smaller threshold (5 days) means reduced periods away from home and also reduced impact on working conditions and health and safety. However, the actual difference among the thresholds considered is very limited. What is unclear is the impact of the proposed measure on compliance. A positive impact from significant simplification of rules/procedures should be expected, but there are also important questions on the capacity to effectively monitor the period spent in a host country and enforce compliance.

In terms of the costs of PP4, significant cost reductions in both administrative and compliance costs for operators should be expected. Expected reductions in compliance costs from PP4 in comparison with the current wage rules – as they apply in four Member States (Germany, France, Austria and Italy) and as are expected to apply in Belgium, Denmark, Luxembourg and Sweden – range from 58% in the case of a 5 day threshold (€190 million/year) to 79% in the case of a 9 day threshold (€605 million/year). Most of the costs savings (97%), are expected to arise for EU13 operators. At the same time, expected reductions in administrative costs across the EU are 53% (€ 605/year), with most of the savings (82%) expected to arise for EU15 operators.

In terms of the costs to authorities, an overall decrease in the scope (number of trips covered) is also expected to lead to overall decrease in enforcement costs. However, this impact will differ across Member States. PP4 will bring significant decreases to the scope for the Member States that apply wage rules and should also lead to reduced enforcement costs. Conversely, all other Member States will see a certain increase in enforcement costs. At EU-28 level, a 9 day threshold will reduce the scope by 78%, a 7 day threshold by 70% and a 5 days threshold by 58%.

## 7.2. Coherence

In terms of the coherence with EU policy, the following aspects have to be examined:

- Internal coherence among the policy measures under consideration;
- Coherence with key EU policy objectives;
- Coherence with other relevant EU legislation, including internal market rules in road transport, Tachograph Regulation, the General working time Directive and the Posting of Workers Directive.

In general, there are no specific issues regarding **internal coherence**, inconsistencies or gaps among the policy packages, which were designed in a way to ensure that all root causes and drivers are addressed. This is particularly the case for **PP2**, **PP3** and the horizontal **PP4**, which include mandatory measures that are expected to work in a complementary manner to strengthen effectiveness of enforcement by increasing consistency, improving communication, cooperation and increasing legal clarity. This is probably less the case for **PP1**, which includes voluntary measures that may not be adopted by all Member States and thus, in practice, only partly address some of the problems identified. **PP4** as regards the application of posting of workers rules to road transport is coherent with the other measures that address the traditional road transport social rules.

As regards **coherence with key EU policy objectives**, the impacts on the principle of non-discrimination and equal opportunities, impact on the functioning of the internal market and impact on SMEs were examined.

In total, while no package has overall negative impacts, the analysis suggests that **PP2** and **PP3** together with **PP4** perform better than **PP1**, which is expected to have a less positive impact as it is a voluntary measure.

**PP2** together with **PP4 (a/b/c)** is expected to have a better impact on coherence. It would have an impact on working conditions and also how operators and drivers can organise the work in a more flexible manner without infringing the rules. **PP3 (+PP4)** is estimated to have a similar impact on coherence as **PP2 (+ PP4)**. In relation to the impact on SMEs, PP4 is expected to have positive impacts and partly offsets the negative impacts from PP2.

As regards **coherence with other relevant EU legislation**, a number of measures under consideration have synergies in terms of reducing distortions of competition, ensuring better protection of rights of workers, enhancing road safety and overall improving administrative cooperation and consistency and effectiveness of cross-border enforcement with better use of digital tools and data exchange systems.

**Table 7-3: Comparison of impacts of policy packages in terms of coherence**

<div>Strongly negative</div> <div>Weakly negative</div> <div>No or limited impact</div> <div>Weakly positive</div> <div>Strongly positive</div>				
	Traditional social measures			Posting workers of
Impacts	PP1	PP2	PP3	PP4 (5/7/9 days threshold)
Internal coherence				
Internal coherence	No coherence issues but more difficult to ensure all measures are implemented	No coherence issues	No coherence issues	No coherence issues
Coherence with key EU policy objectives				
Impact on the principle of non-discrimination and equal opportunities	Insignificant contribution to ensuring equal treatment at the EU level. This will be proportional to Member States voluntarily applying EU recommended uniform schemes for enforcement.	Positive impact on reducing and preventing discriminatory enforcement practices across different Member States.	In addition to PP2, overall positive impact on equal treatment of international and domestic coach drivers, as well as reducing inconsistencies in payment schemes.	Potentially positive impact due to the introduction of clearer and more proportionate posting of workers provisions, although uncertain the extent to which it would equally benefit drivers across different Member States and within the same company.
Impact on the functioning of the transport market and competition	Limited positive impact on improving the functioning of the internal market and fairer competition between operators.	Positive impact in terms of addressing the identified regulatory failure and contribute tackling unfair competition between undertakings across different Member States.	Positive impact on functioning of internal market and fair competition by a range of measures that, put, together, reduce non-compliance and use of illicit/dubious business and employment models.	Uncertain impact on ensuring a level playing field and on helping addressing regulatory failure.
Impact on SMEs	Small negative impacts from increased administrative burden and different rules across EU on performance based pay probably counterbalanced by increased flexibility from allowing spending weekly rest in vehicle.	Negative impact from flexibility from reduced working time reference period, partly offset by small positive impacts from increase in flexibility from break time changes and attestation forms.	Further negative impacts from forbidding spending weekly rest in the vehicle. Small positive impact from flexibility for passenger transport and forbidding of performance-based pay.	Positive impact for most SMEs by reducing the administrative costs for the majority of operations.
Coherence with other relevant EU legislation				
Coherence with other relevant EU legislation	Limited contribution due to voluntary nature of most measures considered.	Strengthening of enforcement and compliance with social rules contributing also to compliance with rules on access to market.	Strengthening of enforcement and compliance with social rules contributing also to compliance with rules on access to market.	Positive role of broader adoption of posting rules towards reducing letterbox companies and fake establishments.

## 8. PREFERRED OPTION

Based on the analysis presented above, the preferred policy option - as regards the traditional road transport social measures - is **PP2**. PP2 is expected to strengthen the enforcement and clarify the legal framework. It should provide the most positive impacts in terms of reduction of stress and fatigue of drivers, without negative impacts on road safety and occupational social health conditions. It should also deliver similar reductions in administrative burdens for national authorities and transport undertakings. In comparison, PP3 appears to have a more negative impact in relation to social conditions, mainly as a result of the proposed derogations for passenger transport operations (particularly the derogations for domestic operations).

In terms of the preferred option on posting of workers, the costs for operators and enforcement costs for authorities are less in the case of a 9 days threshold – due to reduced number of trips within the scope of the minimum wage rules and, thus, costs of compliance and enforcement. On the other hand, from the point of view of workers, a lower threshold means reduced periods away from home (although the actual difference between the thresholds is rather minor) and also reduced impact on working conditions and health and safety. Thus, the 7 day threshold seems to provide a balance between the two potentially conflicting interests (PP4b).

There are also potential synergies between PP2 measures on road transport social legislation and PP4b on posting. Measures of weekly rest and on calculation of working time in PP2, together with PP4b, provide synergies. They should be expected to contribute to improved working conditions through a reduced level of stress and accumulated fatigue and clear and fair terms and conditions of employment of drivers (in particular as regards remuneration) as well as by providing rules on accommodation when spending long periods away from home. The synergy is expected to reinforce the positive impacts of PP2, which would remain the preferred option. The measures in PP2 should contribute to the objectives of PP4b of improving working of drivers and facilitating fair cross-border provisions of transport services.

PP2 and PP4b will also complement other Road Initiatives, in particular the revision of Regulations 1071/2009 and 1072/2009. While Regulations 1071/2009 and 1072/2009 will tackle issues of illicit employment linked to 'letterbox' companies and of illegal cabotage, PP2 will ensure that other cross-cutting measures taken by hauliers, when drivers are abroad for longer periods, e.g. sleeping in cabins, will not undermine social conditions and the level playing between hauliers. In addition, PP4b will ensure that current wage differentials, which can be an incentive to establish 'letterbox' companies or carry out illegal cabotage, will be reduced. Very importantly, the enforcement measures foreseen by PP2 and Regulations 1071/209 and 1072/2009 are complementary and can be carried out jointly by national enforcement authorities, thus providing for overall better efficiency of enforcement. As such, the road initiatives, seen as a package, will work jointly and be mutually reinforcing. None of the initiatives stand-alone will be able to effectively solve the broader multifaceted problem of worsening working, social and business conditions.

In conclusion, the **preferred policy packages are PP2 and PP4b**.

In terms of the expected costs of the preferred policy packages, quantification of the impacts of the measures under PP2 has not been possible in most cases. However, it has been possible to provide an assessment of the expected level of the impact.

**Table 8-1: Summary of expected impact on costs of preferred policy packages**

Type of impact/stakeholder affected	Expected (estimated) impacts on costs	Qualitative assessment/comments
<b>Policy package 2</b>		
Costs to businesses		
• Administrative costs	Small level of increase expected	Limited additional time for checks from working time checks (measure 14c)
• Compliance costs	Small level of increase expected	Small additional (€50-160 per operator/week) costs for some operators for provision of accommodation (measure 2) and from reduced flexibility of operations from 4 week reference period (measure 13) Other costs limited
• Non-compliance costs	Small reduction to the annual non-compliance costs of €14.5 million	
Costs to authorities	Up to €100 million	Mainly driven by costs for additional enforcement staff in the case of a threshold for controlling compliance with working time, reporting and software/equipment updates
<b>Policy package 4</b>		
Costs to businesses		
• Administrative costs	-€605 million	Reduced costs connected to posting of a driver e.g. maintaining extra records of working time, setting up different payslips with separate remuneration for every country, notifications to the host country
• Compliance costs	-€190million (5 day threshold) to -€259 million (9 day threshold)	Reduce burdens on private operators due to minimum wage differentials between 'home and 'host' countries
Costs to authorities	Significant overall reduction of enforcement effort due to reduced scope (>60%) of trips subject to PWD	Significant (>90%) reduction of enforcement effort for MS that currently apply PWD rules – Increase of enforcement costs for all other Member States

## 9. REFERENCES

- AECOM, 2014a. Task A: Collection and Analysis of Data on the Structure of the Road Haulage Sector in the European Union. Report for the European Commission., online: <http://ec.europa.eu/transport/modes/road/studies/doc/2014-02-03-state-of-the-eu-road-haulage-market-task-a-report.pdf>.
- BDO, 2015. Independent social provisions for buses and coaches, Collection of BDO's opinions and requests communicated to the Commission (provided to the consultant by the Commission).
- Broughton et al, 2015. Employment Conditions in the International Road Haulage Sector - Study for the European Parliament, online: [http://www.europarl.europa.eu/RegData/etudes/STUD/2015/542205/IPOL\\_STU%282015%29542205\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2015/542205/IPOL_STU%282015%29542205_EN.pdf).
- CNR, 2016. Comparative study of employment and pay conditions of international lorry drivers in Europe. Paris: Comité National Routier.
- COWI, n.d., Byways in Danish transport - Report for 3F Transport and the Danish Transport and Logistics Association, online: [http://www2.fsc.ccoo.es/comunes/recursos/17629/2268548-Byways\\_in\\_Denmark\\_\(ingles\).pdf](http://www2.fsc.ccoo.es/comunes/recursos/17629/2268548-Byways_in_Denmark_(ingles).pdf).
- DfT, 2014. Synthesis title: Buses and Coaches; Observatory main category: Drivers, online: <http://www.roadsafetyobservatory.com/Review/10091>.
- DTU, 2017. Collection and analysis of data concerning international road transport operations within the EU- Unpublished report: DTU.
- ETSC, 2011. Tackling Fatigue: EU Social Rules and Heavy Goods Vehicle Drivers, Brussels: ETSC.
- ETSC, 2013. Road Safety Performance Index. Towards safer transport of goods and passengers in Europe, online: <http://etsc.eu/towards-safer-transport-of-goods-and-passengers-in-europe-pin-flash-24/>.
- EU-OSHA, 2010. A review of accidents and injuries to road transport drivers, online: [https://osha.europa.eu/en/publications/literature\\_reviews/Road-transport-accidents.pdf/view](https://osha.europa.eu/en/publications/literature_reviews/Road-transport-accidents.pdf/view).
- EU-OSHA, 2010b. Health promotion in the road transport sector, Bilbao: European Agency for Safety and Health at Work.
- European Commission, 2011. Impact Assessment on measures enhancing the effectiveness and efficiency of the tachograph system Revision of Council Regulation (EEC) No 3821/85, online: [http://www.europarl.europa.eu/RegData/docs\\_autres\\_institutions/commission\\_europeenne/sec/2011/0948/COM\\_SEC%282011%290948\\_EN.pdf](http://www.europarl.europa.eu/RegData/docs_autres_institutions/commission_europeenne/sec/2011/0948/COM_SEC%282011%290948_EN.pdf).
- European Commission, 2012b. Report on the implementation in 2009-2010 of Regulation no 561/2006, online: <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52014SC0342>.
- European Commission, 2012. Commission Staff Document: Impact Assessment, Revision of the legislative framework concerning the posting of workers in the context of the provision of services, online: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012SC0064:EN:NOT>.
- European Commission, 2014b. Report on the implementation in 2011-2012 of Regulation (EC) No 561/2006 on the harmonisation of certain social legislation relating to road transport and of Directive 2002/15/EC on the organisation of the working time. COM (2014) 709 final, online: <http://eur-lex.europa.eu/procedure/EN/1042425>.
- European Commission, 2014. Report from the Commission to the European Parliament and the council on the application of the derogation provided in Article 8(6a) of Regulation (EC) N° 561/2006 of the European Parliament and of the Council (12-day rule), online: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014DC0337>.
- European Commission, 2016a. EU Reference Scenario, online: [https://ec.europa.eu/energy/sites/ener/files/documents/20160712\\_Summary\\_Ref\\_scenario\\_MA\\_IN\\_RESULTS%20\(2\)-web.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/20160712_Summary_Ref_scenario_MA_IN_RESULTS%20(2)-web.pdf).
- European Commission, 2016b. Report on the implementation in 2013-2014 of Regulation (EC) No 561/2006 on the harmonisation of certain social legislation relating to road transport and of Directive 2002/15/EC on the organisation of the working time. COM (2014) 709 final, online: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017DC0117>.

European Commission, 2016c. Commission Implementing Regulation (EU) 2016/68 of 21 January 2016 on common procedures and specifications necessary for the interconnection of electronic registers of driver cards, online: European Commission.

European Commission, 2016d. DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 96/71/EC of The European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provision of services-COM(2016) 128 final, online: <http://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-128-EN-F1-1.PDF>.

European Commission, 2017. MS that apply minimum wage to road transport [unpublished document provided by the Commission services],: Not published.

European Environment Agency, 2016. Average age of the vehicle fleet, online: <http://www.eea.europa.eu/data-and-maps/indicators/average-age-of-the-vehicle-fleet/average-age-of-the-vehicle-8>.

Eurostat, 2016a. Labour cost levels by NACE Rev. 2 activity (lc\_lci\_lev), online: <http://ec.europa.eu/eurostat/web/labour-market/labour-costs/database>.

Gron, 2009. Six reasons why hours of service regulations for truck drivers are violated, Online: [http://ssmon.chb.kth.se/volumes/vol13/issue2/4\\_Gron.pdf](http://ssmon.chb.kth.se/volumes/vol13/issue2/4_Gron.pdf).

Hanowski et al, 2003. An on-road study to investigate fatigue in local/short haul trucking. *Accid Anal Prev.*, 35(2), pp. 153-60.

Highways England, 2016. Interim Advice Note 189/16 Policy on Managing Fatigue in the Workplace, Online: <http://www.standardsforhighways.co.uk/ha/standards/ians/pdfs/IAN189.pdf>.

HSE, 2006. The development of a fatigue / risk index for shift workers: Research Report, Online: <http://www.hse.gov.uk/research/rrpdf/rr446.pdf>.

ILO, 1961. R115 - Workers' Housing Recommendation, 1961 (No. 115), online: [http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_ILO\\_CODE:R115](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R115).

ILO, 2015. Priority safety and health issues in the road transport sector, s.l.: [http://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/publication/wcms\\_400598.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_400598.pdf).

International labour organization, 2015. Conclusions on safety and health in the road transport sector, s.l.: [http://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/meetingdocument/wcms\\_422440.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/meetingdocument/wcms_422440.pdf).

Ismeri, 2012. Preparatory study for an Impact Assessment concerning the possible revision of the legislative framework on the posting of workers in the context of the provision of services. Online: <http://ec.europa.eu/social/BlobServlet?docId=7511&langId=en>.

Knauth, 2007. Extended work periods: National Centre for Biotechnology Information.

Legi-France, 2008. Décret n° 2008-244 du 7 mars 2008 relatif au code du travail: Article R4228-27, online: [https://www.legifrance.gouv.fr/eli/decret/2008/3/7/MTST0800001A/jo/article\\_r4228-27](https://www.legifrance.gouv.fr/eli/decret/2008/3/7/MTST0800001A/jo/article_r4228-27).

Monaco et al, 2005. Hours of sleep and fatigue in motor carriage. *Contemporary Economic Policy*, 23(4), pp. 615-624.

MTI, 2017. The Impact of Regulation of the Road Transport Sector on Entrepreneurship and Economic Growth in the European Union. Online: [file:///C:/Users/EG8/Downloads/prezentacja\\_raport\\_its\\_8.02.2017.pdf](file:///C:/Users/EG8/Downloads/prezentacja_raport_its_8.02.2017.pdf).

ORION Consulting, 2008. Potential road safety impacts of certain exemptions from Regulation 561/2006: A Qualified Assessment of Medical Aspects of Fatigue and Long-Haul Driving - A report for EFTA surveillance authority, online: [https://www.innanrikisraduneyti.is/media/adobe-skjol/SerfraedingaskyrslaUndanthagubeidni\\_561-2006.pdf](https://www.innanrikisraduneyti.is/media/adobe-skjol/SerfraedingaskyrslaUndanthagubeidni_561-2006.pdf).

Panteia, 2014. Study on the effectiveness and improvement of the EU legislative framework on training of professional drivers, Online: European Commission.

PWC, 2008. THE NEW REGULATION ON DRIVING AND REST TIMES: THE IMPACT OF THE ABOLITION OF THE 12-DAY DEROGATION FOR BUSES ,

[http://www.europarl.europa.eu/RegData/etudes/etudes/join/2008/405378/IPOL-TRAN\\_ET\(2008\)405378\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2008/405378/IPOL-TRAN_ET(2008)405378_EN.pdf): European Parliament.

Ricardo et al., 2017. Study to support the Impact assessment for the revision of road haulage legislation (Regulations 1071/2009 and 1072/2009) - Final report,: not published.

Ricardo et al, 2016. Ex-post evaluation of road social legislation and its enforcement, London: <http://ec.europa.eu/transport/sites/transport/files/facts-fundings/evaluations/doc/2016-ex-post-eval-road-transport-social-legislation-final-report.pdf>.

Road alliance, 2017. For a common action plan to promote a single road haulage market which better ensures fundamental social rights and more efficient controls.

SDG, 2009. Study of passenger transport by coach - Study for the European Commission - Final report  
online :  
[https://ec.europa.eu/transport/sites/transport/files/2009\\_06\\_passenger\\_transport\\_by\\_coach.pdf](https://ec.europa.eu/transport/sites/transport/files/2009_06_passenger_transport_by_coach.pdf).

Significance et al, 2010. Price sensitivity of European road freight transport – towards a better understanding of existing results. Online:  
[https://www.transportenvironment.org/sites/te/files/media/2010\\_07\\_price\\_sensitivity\\_road\\_freight\\_significance\\_ce.pdf](https://www.transportenvironment.org/sites/te/files/media/2010_07_price_sensitivity_road_freight_significance_ce.pdf).

SKAL, 2013. Proposal to amend driving and rest times for European Union professional road transport drivers, Online:  
[http://www.skali.fi/files/12779/Proposal\\_to\\_Kallas\\_Cabinet\\_5th\\_March\\_2013.pdf](http://www.skali.fi/files/12779/Proposal_to_Kallas_Cabinet_5th_March_2013.pdf).

Smolarek & Jamroz , 2013. Driver Fatigue and Road Safety on Poland's National Roads. International Journal of Occupational Safety and Ergonomics, 19(2), pp. 297-309.

Steer Davis Gleave, 2009. Study of passenger transport by coach,  
[https://ec.europa.eu/transport/sites/transport/files/2009\\_06\\_passenger\\_transport\\_by\\_coach.pdf](https://ec.europa.eu/transport/sites/transport/files/2009_06_passenger_transport_by_coach.pdf): European Commission.

Steer Davis Gleave, 2016. Comprehensive Study on Passenger Transport by Coach in Europe, online: <https://ec.europa.eu/transport/sites/transport/files/modes/road/studies/doc/2016-04-passenger-transport-by-coach-in-europe.pdf>.

Stutts et al, 2003. Driver risk factors for sleep-related crashes. Accident Analysis & Prevention, 35(3), pp. 321-31.

SWOV, 2011. Driver Fatigue: prevalence and state awareness of drivers of passenger cars and trucks: A questionnaire study among driving licence holders in the Netherlands 2011, Den Haag: SWOV.

TLP, 2016. End of the single market - Possible impact of the revision of the Posted Workers Directive on the everyday life of the EU transportation industry. : .

TRT, 2013. Social and working conditions of road transport hauliers - Report for the European Parliament, online:  
[http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL-TRAN\\_ET\(2013\)495855](http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL-TRAN_ET(2013)495855).

## 10. GLOSSARY

ASTIC	Spanish Industry Association
BAG	Bundesamt für Güterverkehr (German road enforcement authority)
BDO	Bundesverband Deutscher Omnibusunternehmer e.V. (German national bus and coach industry association)
Cabotage	National carriage for hire or reward carried out on a temporary basis in a host Member State
CLOSER	Combined Learning Objectives for Safer European Roads
CNR	Comité National Routier
CORTE	Confederation of Organisations in Road Transport Enforcement
DfT	UK Department for Transport
DTU	Technical University of Denmark
DVSA	UK Driver and Vehicle Standards Agency
EC	European Commission
EEA	European Express Association
EPTO	European Passenger Transport Operators
EU15	EU Member States: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.
EU13	EU Member States: Bulgaria, Czech Republic, Croatia, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia
EU28	EU15 and EU13
ECJ	European Court of Justice
ECR	Euro Contrôle Route
ERRU	European Register of Road Transport Undertakings
ETF	European Transport Workers' Federation
ETSC	European Transport Safety Council
Freight forwarder	A freight forwarder is a person or company that organises shipments for individuals or firms. A forwarder is not typically a carrier, but is an expert in supply chain management.
GDP	Gross Domestic Product
HGV	Heavy Goods Vehicle
HSE	UK Health and Safety Executive
KSS	Karolinska Sleepiness Scale
ILO	International Housing Recommendation
IRU	International Road Transport Union
LCV	Light Commercial Vehicle
LGV	Light Good Vehicle
NLA	Nordic Logistics Association
OPC	Open Public Consultation
OSHA	Occupational Safety and Health Administration
PWD	Posting of Workers Directive
RRS	Risk Rating System
SDG	Streer Davies Gleave

TACHONet	Telematic network in operation across the EU to allow an automated exchange of information between Member States.
TLP	Transport Logistyka Polska
TRACE	Transport Regulators Align Control Enforcement
UEAPME	European Association of Craft, Small and Medium-Sized Enterprises.
UETR	European Road Haulers Association
WDC	Working days checked
WKÖ	Austrian Federal Economic Chamber
WTD	Working Time Directive