

FINAL REPORT

Measurement data and analysis

as specified in the specific contracts 5&6 on Modules 3&4

under the Framework Contract n° ENTR/06/61

Report on the Transport Priority Area

EU PROJECT ON BASELINE MEASUREMENT AND
REDUCTION OF ADMINISTRATIVE COSTS

5th March 2009

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Executive Summary

The European Commission has embarked on an ambitious 'Better Regulation' exercise aimed at a reduction of the administrative burden for European business by 25% by 2012. A key part of its Action Programme consists of measuring the administrative costs for business of meeting obligations to provide information under selected items of the EU legislation and the relevant national implementing legislation. A Consortium consisting of Capgemini, Deloitte and Ramboll Management was engaged by the European Commission to carry out the measurement.

The Standard Cost Model (SCM) that was used for this measurement is a method for determining the administrative costs for business imposed by regulation. The SCM method is a way of breaking down regulation into a range of manageable components that can be measured. The SCM neither addresses nor questions the policy objectives of each piece of regulation. As such, the measurement and analysis focus only on the administrative activities that must be undertaken in order to comply with regulation, not on the benefits that accrue from the legislation.

This document is the Final Report on the measurement of the Transport Priority Area (Priority Area). Its results are based on measurements conducted in six Member States, namely Belgium, Bulgaria, Poland, Portugal, Slovenia and Slovakia. Along with these six Member States, additional measurements were taken in Finland, France, Hungary and Sweden, together with, where it existed, data from five Member States – Austria, Denmark, Germany, the Netherlands and the United Kingdom – that have previously conducted baseline measurements.

This report presents:

- the results of the measurement
- cost data for all 27 Member States as input for the prioritisation and analysis of future simplification work
- analysis of the measurement data

- first suggestions collected during interviews and workshops on how to reduce the administrative burden for business arising from the Information Obligations identified¹.

The mission of the Directorate-General for Energy and Transport (DG TREN) is twofold. In transport policy, the EU aims to promote sustainable mobility by combining Europe's competitiveness with the welfare of its citizens, for greater safety and security and enhanced rights.²

This Priority Area (Priority Area) focuses specifically on the issue of social legislation related to road transport, e.g. "Recording time spent driving a vehicle and recording working time", and to railway safety, e.g. the "Applications for safety documents" such as safety certificates and the "Submission of safety reports".

The legislation in scope for the Transport Priority Area is:

Table 1: Legislation in scope for the Transport Priority Area

EU Legislation
Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85

¹ During the interviews and workshops with business and experts, several initial simplification ideas were collected. A structured and detailed analysis of possible reduction measures is being conducted as part of Module 5. Thus, this report only contains a summary of the suggestions gathered during the measurement phase and does not represent a final list of simplification suggestions.

² http://ec.europa.eu/dgs/energy_transport/matthias_ruete/mission_en.html.

EU Legislation

Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (Railway Safety Directive)

This Table is based on data compiled by the Consortium.

Main findings in the Transport Priority Area

- On the basis of one Directive and one Regulation, a total of eight EU Information Obligations (IOs) were identified.
- The transposition of the eight EU IOs resulted in 185 national IOs across the 27 Member States.
- The total administrative cost of these eight IOs is estimated at a total of €3,104 bn EU-wide.
- Of the €3,104 bn due to EU IOs, 97.5% has been classified as administrative burdens.
- Of the €3,104 bn of administrative costs, 99.9% stem from EU IOs. (The amount due to national obligations going beyond EU Requirements is €30,030).
- One IO – “Recording time spent driving a vehicle and recording working time” – alone accounts for €3,062 bn in administrative costs, representing 98.6% of the total administrative cost caused by EU IOs. This IO stems from Regulation (EC) No 561/2006.

The most burdensome part of Regulation (EC) No 561/2006 is the Information Obligation (IO) “Recording time spent driving a vehicle and recording working time”. For this IO tachographs are used by every driver³. The IO “Notification of exceptional situations in which driving times cannot be met (exemption reasons)” is linked to this IO. These

³ A tachograph is a recording device fitted in the dashboard, which permanently records the speed of the vehicle, the total distance travelled and the distance between stops, the driving time and standing time.

notifications are made by writing the exemption reasons on the analogue disc or on the print-out when using a digital tachograph. This activity is performed on a regular basis by the driver.

The Table below shows the administrative costs per piece of legislation and its share of the total costs. It is clear that for this Priority Area, Regulation (EC) No 561/2006 accounts for almost all administrative costs.

Table 2: Administrative Cost by piece of legislation

EU Legislation	Admin. Cost (€ x 1,000)	Share of total (%)	Admin. Burden (€ x 1,000)	Share of Admin. Cost (%)
Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85	3,101,848.7	99.91	3,024,158.9	97.50
Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (Railway Safety Directive)	2,657.1	0.09	2,652.8	99.84
Total	3,104,505.8	100.00	3,026,811.8	97.50

"This Table is based on data compiled by the Consortium".

The administrative costs arising from Directive 2004/49/EC on safety on the Community's railways are comparatively high for a limited population relative to those from the Regulation on road transport. This population consists of railway undertakings and railway infrastructure managers. The number of railway undertakings differs, for example, from one in Finland to 78 in Poland. For the Railway Safety Directive 2004/49/EC, the "Application for a safety certificate" and the "Submission of a safety report" cause the highest administrative costs. The main reason for the high costs for the "Application for the safety certificate" is the work involved in filling in documents and collecting the information that is necessary in order to be able to fill in the documents. The main reason for high costs for the "Submission of a safety report" is that the population, i.e. the number of times a report has to be handed in, is higher compared to the population

affected for other Railway IOs. It was also observed that familiarisation with and adjusting the report to a predefined format takes a lot of time.

Table 3 below shows the total costs per IO.

Table 3: Administrative Cost by EU IO

EU IO	Legislation	Article	Admin. Cost (€ x 1,000)	Share of total (%)	Admin. Burden (€ x 1,000)	Share of Admin. Cost (%)
Recording time spent driving a vehicle and recording working time	Regulation (EC) No 561/2006	Art. 2; Art. 6 par. 5	3,062,233.7	98.64	2,984,544.0	97.46
Notification of exceptional situations in which driving times cannot be met (exemption reasons)	Regulation (EC) No 561/2006	Art. 4; Art. 12	39,614.9	1.28	39,614.9	100.00
Application for safety certificate	Directive 2004/49/EC	Art. 9; Art. 10 par.1; Art. 12 par. 1	1,582.1	0.05	1,582.1	100.00
Submission of a safety report	Directive 2004/49/EC	Art. 9 par. 4	910.8	0.03	910.8	100.00
Application for safety authorisation	Directive 2004/49/EC	Art. 11 par. 1	65.8	0.00	65.8	100.00
Submission of a rolling stock technical file	Directive 2004/49/EC	Art. 14 par. 2; Art. 14 par. 3; Art. 14 par. 4	54.5	0.00	54.5	100.00
Cooperation with serious accident investigations	Directive 2004/49/EC	Art. 19; Art. 20	33.3	0.00	31.6	94.76
Reporting of serious accidents and incidents to investigation body	Directive 2004/49/EC	Art. 21 par. 3	10.7	0.00	8.2	76.65
Total			3,104,505.8	100.00	3,026,811.8	97.50

This Table is based on data compiled by the Consortium.

The IO “Recording time spent driving a vehicle and recording working time” accounts for 98.6% of the total administrative costs. The two pieces of legislation, Directive 2004/49/EC and Regulation (EC) No 561/2006, target totally different parts of the transport sector. Regulation 561/2006 involves a high population with lower wage employees, whereas Directive 2004/49 covers a rather small population with higher wage employees, such as managers and professionals. The administrative costs for the IOs of Directive 2004/49/EC are €2.7 million

Reduction proposals aimed at easing the burden of the IO “Recording time spent driving a vehicle and recording working time” cover technical, legislative and business processes.

One technical proposal is to allow extraction and submission of data wirelessly from the mass storage of the tachograph to the back office instead of having to physically dock the vehicle. Legislation could be amended to exclude more categories of vehicles and businesses from using a tachograph. Business processes could be changed to remove the obligation to record time beyond driving time on a form and have it signed by the employer or other entity responsible.

These preliminary suggestions, the baseline measurement data, the analysis of the business processes implemented by businesses to comply with the IOs and different ways of handling the IOs across Member States, all contribute to this report as a strong basis for the work the Consortium is currently performing for identifying, analysing and prioritising suggestions for reducing the administrative burdens linked to the IOs in scope of this measurement.

1. Introduction

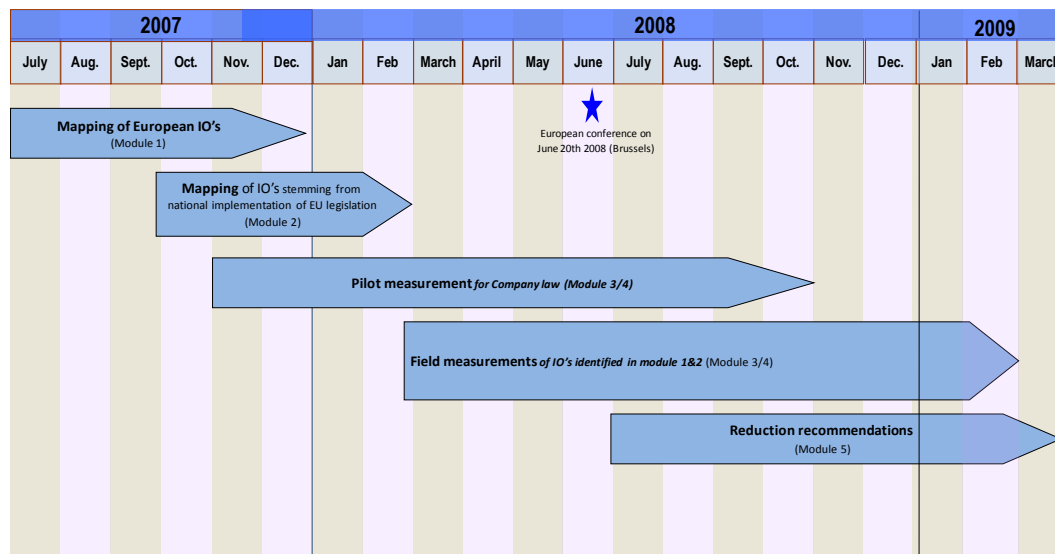
The “EU Project on baseline measurement and reduction of administrative costs” covers Information Obligations (IOs) stemming from 42 Community legislative acts⁴ and from the related national transposition acts, grouped into 13 Priority Areas (Priority Areas):

- Agriculture and Agricultural Subsidies
- Annual Accounts/Company Law
- Cohesion Policy
- Environment
- Financial Services
- Fisheries
- Food Safety
- Pharmaceutical Legislation
- Public Procurement
- Statistics
- Tax Law (VAT)
- Transport
- Working Environment/Employment Relations.

The Project uses the EU Standard Cost Model (SCM) methodology and is structured in five modules, as shown in the following Figure:

⁴ See: http://ec.europa.eu/enterprise/admin-burdens-reduction/docs/42_LegislativeActs.pdf.

Figure 1: Project structure and timelines



By Capgemini/Deloitte/Ramboll Management.

As the Figure above shows, the first step was to map the Information Obligations (IOs) (Modules 1 & 2). The focus was both on the IOs stemming directly from EU legislation and on those stemming from the national implementation of EU legislation. Moreover, the “over-implementation” (or “gold-plating”) of an EU legal Act at national level, in terms of additional IOs or procedural requirements, amended frequency, or population (i.e. coverage) – the so-called national obligations going beyond EU Requirements – was also documented, as it could lead to an increase in administrative costs linked to the provisions of the EU legislation.

The next phase was to determine the administrative costs resulting from the EU IOs and national obligations going beyond EU requirements (Modules 3 & 4 respectively) through interviews and workshops, along with estimates made by experts. Data was collected in a sample of businesses in six Member States (the ‘measurement countries’) and supplemented by existing data from Member States having already undertaken SCM measurements (the ‘baseline countries’)⁵. Based upon this dataset, the administrative cost

⁵ European Commission Communication, 24 January 2007, *Action Programme for Reducing Administrative Burdens in the European Union* – COM (2007)23 final.

for the remaining EU Member States (the ‘extrapolation countries’) was estimated through extrapolation. National obligations going beyond European requirements were measured in all countries where they occur as they are specific to each Member State (MS).

The current work within this project focuses on the development of reduction proposals to reach the European Commission’s goal of a 25% reduction in administrative burdens by 2012 (Module 5).

The current report covers the results of the work undertaken for Modules 3 and 4 for the Transport Priority Area. More specifically, it contains:

- In Section 2: an overview of the Transport Priority Area framework. This section presents the focus of the Priority Area, the chosen measurement approach, as well as the high-level findings of the mapping and measurement phases;
- In Section 3: an analysis of the legal acts and the most burdensome IOs in scope;
- In Section 4: an outlook section looking ahead to the next phase;
- Annex: including a listing of methodological challenges faced in this Priority Area.

It does not include a detailed description of the Action Programme for Reducing Administrative Burdens in the European Union or of the underlying methodology followed by the Consortium. The main report on the Measurement data and analysis as specified in the specific contracts 5&6 on Modules 3&4 under the Framework Contract n° ENTR/06/61 presents both of these together with the overall results of 13 mainstream Priority Areas.

2. Transport Priority Area Framework

This section sets the scene for the detailed presentation of the results of the data collection in the sections which follow. This section contains:

- an introduction to the Directive and Regulation in scope
- a summary of the general methodological concept and the measurement approach chosen in the Priority Area, and
- an overview of the high-level findings of the mapping phase and the measurement results.

2.1 Characteristics and objectives of the Priority Area

EU transport policy is focused on eliminating borders between Member States and therefore contributes to the free movement of individuals and of goods. Its principal aims are to complete the Single European Market, ensure sustainable development, extend transport networks throughout Europe, maximise use of space, enhance safety and promote international cooperation. It is an essential component of the Lisbon Strategy and contributes to the EU's social and territorial cohesion.

There are two legislative acts in scope for the measurement of the Transport Priority Area:

- Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85.
- Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (Railway Safety Directive).

Regulation (EC) No 561/2006 on the harmonisation of certain social legislation

Regulation (EC) No 561/2006 of the European Parliament and of the Council relates to road transport and lays down rules on driving times, breaks and rest periods for drivers

engaged in the carriage of goods and passengers by road. It harmonises the conditions of competition between inland transport modes and improves working conditions and road safety. This Regulation also aims to promote improved monitoring and enforcement practices by Member States and improved working practices in the road transport industry. In order to review the driving and rest time of drivers during reviews by traffic standards organisations or accident investigations, tachographs are used.

The Regulation applies to all cross-border transport carried out exclusively within the territory of the European Community, or between the Community, Switzerland and the countries party to the Agreement on the European Economic Area. The European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR) applies to international road transport operations partly undertaken outside this area. The agreement applies to all vehicles registered in the AETR area, including the Community, for the whole journey. It also applies to vehicles registered in third countries which are not contracting parties to the AETR for the part of the journey in the AETR area, including the Community.

Directive 2004/49/EC on safety on the Community's railways

This Directive aims at ensuring the development and improvement of safety on the Community's railways and improved access to the market for rail transport services. The Directive applies to the railway system of the Member States and covers safety requirements for the system as a whole, including infrastructure and traffic management, as well as the interaction between railway undertakings and infrastructure managers.

Before Directive 2004/49 came into force, Member States had their own national approaches to railway safety, with different safety targets and different methods. Examples are differences in technical standards, rolling stock standards and the certification of staff and railway undertakings. To address this, the Directive focuses on four major aspects:

- Setting up an authority responsible for supervising safety in each Member State;
- Harmonisation of safety certificates delivered in the Member States;

- Establishing common safety indicators (CSIs) to ensure that the system complies with the common safety targets (CSTs) and facilitate the monitoring of railway safety performance;
- Defining common rules for safety investigations⁶.

The replacement of national rules by the Railway Safety Directive thus led to a shift to EU level in the origin of administrative burdens. The harmonised procedure of the Directive may be as burdensome as the various national requirements. However, administrative burdens were diminished at the same time by simplifying, for instance, the granting of safety certificates.

2.2 Measurement approach

The methodology used during this project is based on the adapted EU SCM Manual submitted as part of the Module 1 Final Report in mid-February 2008. A short introduction to the main characteristics of the general measurement approach, as well as the approach chosen within the Transport Priority Area, is given below. For more information on the methodology, please see the Main Report and/or the adapted EU SCM Manual.

2.2.1 General methodological concepts

The EU Standard Cost Model (EU SCM) breaks down administrative costs imposed by legal acts into components that can be assessed with reasonable accuracy.⁷ Thanks to this analytical approach, it is possible to:

- locate the most costly obligations and the greatest reduction opportunities;
- formulate reduction proposals; and
- determine at which level reduction measures should be adopted.

⁶ SCADPlus, <http://europa.eu/scadplus/leg/en/lvb/l24201a.htm>, summaries of legislation, railways (as of 16.5.2007 update). See also: Consideration (1), Directive 2004/49/EC of the European Parliament and Of The Council of 29 April 2004, Official Journal of the European Union, L164/45, 30.4.2004.

⁷ The SCM does not aim at producing statistically valid results, but rather estimates (i.e. figures based on relatively small samples or expert judgment). Considering the level of detail and the number of parameters involved, conducting statistic measurements would not be cost-efficient.

The EU SCM methodology neither addresses nor questions the policy objectives of each piece of legislation. As such, the measurement focuses only on the administrative activities that must be undertaken in order to comply with legislation and not on whether the legislation itself is reasonable or not.

While the methodology may also be applied to civil society and the public and private sectors, this project focuses exclusively on the administrative costs for business.

Thus, administrative costs are defined as the costs incurred by enterprises in meeting legal information obligations. An Information Obligation (IO) is a legal obligation placed on businesses to provide information on their activity or production, either to public authorities or to private parties⁸. Every IO has attributes that describe the:

- content of the data required or “data requirement” (what must be provided),
- target group (who must provide it), and
- frequency (when it must be provided).

IOs stemming from EU legislation are labelled EU IOs, while IOs stemming from national implementation are called national IOs.

Some EU legislative acts also mention the *possibility* for Member States to ask for additional information (i.e. “...Member States may ... require the inclusion of other statements in the annual accounts in addition to the documents referred to in the first sub-paragraph ...”). Such Possibilities Stated in the EU Legal Act are not to be understood as EU Requirements insofar as Member States are not obliged to ask for that information. Nevertheless such Possibilities Stated in the EU Legal Act were documented by the Consortium as they often pave the way for additional legislative requirements introduced at national level.

⁸ These private parties are usually consumers and/or other businesses.

In many cases the possibility for Member States to ask for additional information also exists even though it is not stated in the EU legal text⁹. Listing such Possibilities Not Stated in the EU Legal Act as part of the description of EU legal texts would be fastidious and inefficient. Documenting cases of national obligations going beyond what the EU requires has, however, been part of the screening of national IOs.

Together, the Possibilities stated in the EU Legal Act and the Possibilities not stated in the EU Legal Act are called “National obligations going beyond EU Requirements”, or “Delta ACs”.

When analysing the administrative costs, a distinction should be made between information that would be collected and processed by businesses even in the absence of the legislation and information that is solely collected because of a legal obligation. The former are called “business-as-usual” (BAU) costs¹⁰, the latter administrative burdens. Added together the administrative burdens and business-as-usual costs constitute the administrative costs. Having quantitative figures on the business-as-usual costs is of crucial importance for the Commission in the light of its reduction target, which is expressed in terms of administrative burdens (not administrative costs).

The objective of Modules 1 and 2 was to carry out a preparatory analysis of the EU and national legislation to form the foundation for the field measurements of administrative costs in the 27 European Member States. Within Module 1 and 2, the IOs stemming directly from EU legislation in scope as well as any national obligations going beyond the EU Requirements in scope of this project were identified and registered¹¹.

⁹ As a general principle, Member States have the right to legislate on any issues as long as “Possibilities not Stated in the EU Legal Act” do not contradict EU law.

¹⁰ A description on how the BAU costs were calculated can be found in chapter 5.2. of the Main Report on the measurement data and analysis as specified in the specific contracts 5&6 on Modules 3&4 under the Framework Contract n° ENTR/06/61.

¹¹ For more information on Module 1 and 2, please see first edition of the adapted EU SCM manual and the Final Report for Module 1 and 2.

In Module 3 and 4 different approaches were used to collect and calculate the information needed to determine the administrative costs at the EU level as well as at the national level. The remainder of this section presents a brief overview of these approaches and the underlying rationales.

Experience from all previous SCM measurements shows that the top 20% most burdensome IOs in any given area will represent 80% of the costs. Following this principle, an initial assessment of population and cost parameters was conducted and estimation produced of the expected administrative costs for each EU IO.

To prioritise the EU IOs, an expert assessment was carried out of the following:

- Expected number of businesses concerned/number of occurrences
- Complexity of the business process that businesses implement to comply with the IO (time spent).

The purpose of the prioritisation was to select those IOs which had the highest estimated cost. The position on the priority list, i.e. if the IOs belonged to the top 20% or the remaining 80% of estimated costs, determined the manner in which data was collected. The 20% most burdensome IOs within each Priority Area were designated as Prioritised IOs and earmarked for in-depth measurement. The remaining 80% for each Priority Area were marked as Non-prioritised IOs and were therefore subject to less rigorous measurement. The Prioritised IOs were analysed and measured through workshops and interviews, whereas IOs with lower estimated costs were costed through telephone interviews and expert assessments, or similar less intensive methods. In this way, the resources were predominantly concentrated on collecting data on the most costly IOs.¹² The demarcation between Prioritised IOs and Non-prioritised IOs was made at Priority Area level only and

¹² In a few cases the data collection showed that non-prioritised IOs were more cost intensive than prioritised IOs. Due to the iterative process in the project and the time and resource constraints, this had to be accepted without changing the data collection approach.

not at overall project level, as to have done the latter would have led to some of the less burdensome Priority Areas having only Non-prioritised IOs.

The IOs selected for interviews and workshops were clustered in groups that could logically be covered by interviews at about the same time, most often because they involved the same target group and administrative tasks that the same employee type usually performs. The result was a list of several groups of IOs known as campaigns.

EU IOs were measured in a sample of six Member States. The data collected in the six Measurement Countries supplemented with data from existing measurements on the EU IOs from the Baseline Countries were extrapolated to similar IOs in the other countries and aggregated to the EU level. However, for the national obligations going beyond EU Requirements, data was collected in each country where they were identified. Obviously, extrapolation cannot apply to these as they are peculiar to the specific country.

The extrapolation exercise consisted of predicting cost and can basically be understood as generating the best estimates of the administrative activities conducted by businesses in a country where data has not been collected, based on data from other countries where data was collected. The SCM does not aim at producing statistically valid results, but rather estimates (i.e. figures based on relatively small samples or expert judgment). Considering the level of detail and the number of parameters involved, conducting statistical measurements would not have been cost-efficient.

The selection of Member States for measuring the prioritised IOs was based on the following criteria:

- Population of the countries
- Spread of geographic location
- Duration of EU Membership
- If/when legislation is applicable
- Implementation of Possibilities Stated in the EU Legal Acts.

The purpose of using the selection criteria was to guarantee that the results represented different population/country sizes within the EU. Furthermore, it ensured that the data collection covered different geographical regions (geographically and in terms of the

historical development of the EU). Lastly, the selection criteria were designed to ensure that the Member States chosen for data collection had transposed the legislation. Combined, the selection criteria ensured a sound foundation for the extrapolation.

One of the requirements of the EU project on baseline measurement and reduction of administrative costs was to follow a 'full Member State coverage measurement approach'. Thus Member States which were relatively less important in terms of size were also part of the measurement. As a result, the sample selected is not always representative for each Priority Area. Further studies would be needed to achieve fully representative results.

When data collection was carried out, the results were summarised for each business interviewed. These empirical results were then standardised with the objective of providing a single estimate of what would be required for a normally efficient business to complete each administrative activity in order to comply with a given national IO.

By combining the data collected from the workshops, face-to-face interviews and telephone interviews, a qualitative assessment was made of the resources a business devotes to each cost parameter related to fulfilling an IO. More specifically, an assessment was conducted on internal time spent and employee type per activity, consultancy costs, and costs of equipment. The goal of the standardisation is not to average the cost data obtained through the workshops and interviews, but to get a plausible result for a normally efficient business for each IO. The normally efficient business is defined as a business within the target group that perform administrative activities required by the IO neither better nor worse than may reasonably be expected.

2.2.2 Measurement approach chosen for the Transport Priority Area

The choice of the IOs was based on the anticipated number of occurrences and the complexity of the IO. The Consortium identified eight Information Obligations in the Transport Priority Area. They were prioritised as high, medium and low. Of the eight, six IOs formed the scope of the measurement via workshops and interviews in Module 3. Data was collected via face-to-face interviews following provision of an upfront information package. Where necessary follow-up interviews were carried out. In workshops, the complex processes were discussed with people involved in different stages of a process.

The Table below lists the EU IOs and their prioritisation.

Table 4: EU legislation and prioritisation by 'high', 'medium' and 'low'

EU Legislation	
Regulation (EC) No. 561/2006 on the harmonisation of certain social legislation relating to road transport	
EU IO	Prioritisation ¹³
"Recording time spent driving a vehicle and recording working time"	***
"Notification of exceptional situations in which driving times cannot be met (exemption reasons)"	*
Directive 2004/49/EC on safety on the Community's railways	
EU IO	Prioritisation
"Application for safety certificate"	***
"Submission of a rolling stock technical file"	***
"Submission of a safety report"	**
"Application for safety authorisation"	**
"Cooperation with serious accident investigations"	*
"Reporting of accidents and incidents other than serious accidents"	*

This Table is based on data compiled by the Consortium.

IOs in Regulation 561/2006/EC:

- "Recording time spent driving a vehicle and recording working time"
- "Notification of exceptional situations in which driving times cannot be met (exemption reasons)".

As it was easy to include the 'low' priority IO "Notification of exceptional situations in which driving times cannot be met" in the data collection, this was done in combination with the highly prioritised IO on "Recording time spent driving a vehicle and recording working time".

¹³ *** = 'high'; ** = 'medium'; * = 'low'.

The IOs in Directive 2004/49/EC in the 'high' prioritisation group are:

- "Application for a safety certificate"
- "Application for safety authorisation".

The IOs in Directive 2004/49/EC in the 'medium' prioritisation group are:

- "Submission of a rolling stock technical file"
- "Submission of a safety report".

During the measurement, the two 'low' priority IOs were added to the measurement. These are the IOs "Cooperation with serious accident investigations" and "Reporting of accidents and incidents other than serious accidents".

Segmentation

It was expected that the same IO would be handled differently by different types of businesses. Therefore, the following segments were defined for the IOs that were going to be measured in the interviews.

Segments for Regulation 561/2006

Since 1 May 2006 under Regulation (EC) No 561/2006, digital tachographs have progressively been replacing analogue versions since they are mandatory in new vehicles. The digital tachographs support the objectives of Regulation (EC) No 561/2006 of harmonising the conditions of competition between modes of inland transport and improving working conditions and road safety, as the digital tachograph facilitates inspections and controls in the Member States.

It is expected that by 2012 almost all transport businesses will have installed digital equipment. It will be interesting to monitor during this transition period from 2006 to 2012 the difference in the administrative burden between the use of analogue or digital tachographs as perceived by drivers. For that reason, the Consortium has taken both regimes into account during the data collection.

The following segmentation was used:

- Businesses driving vehicles with analogue tachographs;
- Businesses driving vehicles with digital tachographs.

At the request of the Directorate-General for Transport and Energy (DG TREN), the Consortium recruited small, medium and large transport businesses where applicable. The following criteria were used:

- Small: 1 or 2 drivers
- Medium: 5 to 10 drivers
- Large: more than 10 drivers.

The objective was to find out whether the administrative burden is experienced differently by drivers working for small, medium or large transport businesses. This does not affect the initial segmentation, since, as agreed by DG TREN, there was no requirement to cost administrative burdens for the size-based segmentation. However, some qualitative insight is in section 3.1.1.3.

Segments for Directive 2004/49

Railway undertakings must comply with specific obligations and procedures if they wish to operate rolling stock on the railway infrastructure of another Member State. In the light of the current harmonisation measures taken by the European Commission, it was meaningful to measure the administrative burden that comes from the requirements for businesses to apply for a safety certificate in each individual Member State.

For this reason, businesses were segmented as follows:

- Railway undertakings applying for operations in their own Member State
- Railway undertakings applying for operations in a Member State other than their own.

Campaigns

The campaigns, a logical grouping of IOs that could be covered in one interview or workshop, for the Transport Priority Area were based on the target groups mentioned in the legislation and additional segmentation based on assumptions on differences in the

way activities are carried out. The Table below shows the campaigns together with the complete list of IOs covered in the various campaigns.

Table 5: Campaigns

Campaign	Description
Campaign 1:	Safety management system - railway undertakings
	Submission of a safety report
Campaign 2:	Safety management system - infrastructure managers
	Submission of a safety report
	Application for safety authorisation
Campaign 3:	Safety certificate - railway undertakings applying for operations in another MS
	Application for a safety certificate
Campaign 4:	Safety certificate - railway undertakings applying for operations in their own MS
	Application for a safety certificate
Campaign 5:	Rolling stock technical file - railway undertakings wanting to place rolling stock in service in another MS
	Submission of a rolling stock technical file
Campaign 6:	Driving times - transport businesses using analogue or digital tachographs
	Recording time spent driving a vehicle and recording working time
	Notification of exceptional situations in which driving times cannot be met (exemption reasons)

This Table is based on data compiled by the Consortium.

The number of railway undertakings is generally limited, although the number of undertakings the Directive applies to is increasing¹⁴. In Finland, there is just one railway undertaking. By comparison, in Poland there are 78. Many countries have one large railway undertaking with a market share larger than 75%. In two-thirds of the Member States,

¹⁴ According to the report *Energy and Transport in Figures 2006 and 2007* in these years the number of railway undertakings increases net with 32

there are no more than three infrastructure managers; in half the Member States only one. To investigate serious accidents, an independent investigation body is set up per Member State.

Countries where the measurements took place

The decision as to which countries to measure for the Transport Priority Area was mainly based on the transposition status of the Railway Directive. The Consortium had to change the initial selection of Measurement Countries, which included Italy and Luxembourg, because the relevant national authorities indicated that not all EU Information Obligations stemming from Directive 2004/49/EC could be measured. In Italy, the national transposition law is Legislative Decree 162 of 10 August 2007¹⁵, which could not be taken into consideration as it only entered into force after the project baseline date. Directive 2004/49/EC had not yet been completely transposed in Luxembourg. The authorities confirmed that the transposition of some of the provisions of Directive 2004/49/EC was still pending in Parliament. As the measurement in Italy and Luxembourg would not have been meaningful, in agreement with DG TREN and DG Enterprise, the Consortium replaced Italy and Luxembourg with Belgium and Slovakia.

The final selection of the six countries for the Module 3 measurements for the Transport Priority Area, as approved by DG TREN at the start of the measurement was, therefore, the following: Belgium, Bulgaria, Poland, Portugal, Slovakia and Slovenia.

During the measurement, it became apparent that for two of the IOs of the Railway Safety Directive not all Measurement Countries had enough experience under the current regime.

This situation concerned the following two IOs:

- Application for Safety Authorisation
- Application for Safety Certificate.

¹⁵ Decreto legislativo n. 162 del 10 agosto 2007 (G.U. n. 234 dell'8 ottobre 2007, Suppl. ordinario n. 199/L).

In addition, the IO related to the rolling stock technical file had not yet been implemented in all Member States,

In Belgium and Bulgaria, railway undertakings and infrastructure managers were in the process of applying for a safety certificate or safety authorisation. The other four Measurement Countries had transposed the legislation, but had not issued a safety certificate or safety authorisation under the current regime at the time the measurement was carried out and, equally, businesses were not in the application process.

In order to obtain enough measurement results, additional measurements were carried out in Finland, France, Hungary and Sweden instead of Poland, Portugal, Slovakia and Slovenia. They were chosen as alternative Measurement Countries for these IOs as indicated in the Issues and Approaches document¹⁶.

2.3 High-level findings of the EU and national mapping in the Transport Priority Area

The following section summarises the main findings of the EU and national mapping in the Transport Priority Area, which resulted from the work done during Module 1 on the identification and classification of EU IOs and the Possibilities Stated in the EU Legal Act, followed by the identification of national IOs transposing EU legislation as well as the linking of EU IOs and national IOs in Module 2. The full results of this were presented in the final reports on Modules 1 and 2 of the EU project on baseline measurement and reduction of administrative costs¹⁷.

As stated in Section 2.2.1 administrative costs are defined as the costs incurred by businesses in meeting legal information obligations. Every Information Obligation has attributes that describe the:

- Content of data required or “data requirement” (what must be provided)
- Target group (who must provide it), and
- Frequency (when it must be provided).

¹⁶ Transport Priority Area, Railway Safety Directive, Issues and Approaches, v1.0

¹⁷ For the details of the mapping please refer to the reports on Modules 1 and 2.

2.3.1 Main results of the EU mapping

The Consortium identified eight Information Obligations in the Priority Area of Transport. The Table below provides an overview of the number of IOs per piece of legislation.

Table 6: Total number of EU IOs and Possibilities within the Priority Area

EU Legislation	Number of EU IOs	Total
Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85 (Text with EEA relevance) – Declaration	2	2
Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway	6	6
Total	8	8

This Table is based on data compiled by the Consortium.

The EU IOs identified are presented in the Table hereafter.

Table 7: EU Requirements identified in the Transport Priority Area per piece of legislation

EU Legislation name	EU Requirement name
Regulation on the harmonisation of certain social legislation 561/2006/EC	"Recording time spent driving a vehicle and recording working time"
Regulation on the harmonisation of certain social legislation 561/2006/EC	"Notification of exceptional situations in which driving times cannot be met (exemption reasons)"
Directive on safety on the Community's railways 2004/49/EC	"Application for safety certificate"
Directive on safety on the Community's railways 2004/49/EC	"Submission of a safety report"
Directive on safety on the Community's railways 2004/49/EC	"Application for safety authorisation"
Directive on safety on the Community's railways 2004/49/EC	"Submission of a rolling stock technical file"
Directive on safety on the Community's railways 2004/49/EC	"Cooperation with serious accident investigations"
Directive on safety on the Community's railways 2004/49/EC	"Reporting of accidents and incidents other than serious accidents"

This Table is based on data compiled by the Consortium.

2.3.2 Main results of the national mapping

The Table below provides an overview of the national IOs and Possibilities Not stated in the EU legal Act identified per country.

We would like to draw attention to the fact that there are a number of cases where no national equivalent of the EU requirements was found. An IO may be 'missing' because:

- The IO was not found in the pieces of legislation validated by the European Commission and the national Single Points Of Contacts;
- The EU Directive is not applicable in a Member State;
- The EU Directive had not been transposed in a Member State;
- The EU Directive had been transposed, but after the baseline date for this project (9 July 2007).

Table 8: Overview of National IOs and Possibilities Not Stated in EU Legal Act

					National Obligations going beyond EU Requirements		
	EU Requirements				Possibilities stated in the EU Act	Possibilities not stated in the EU Act	
	# of EU Requirements Identified	# of EU Requirements not transposed	# of EU Requirement transposed in MS	# of National IOs transposing EU Requirements	# of Possibilities stated in EU act	# of Possibilities Not stated in EU act	Total # of national IOs
AT	8		8	8			8
BE	8		8	8		2	10
BG	8		8	8		1	9
CY	8	6	2	2			2
CZ	8		8	8		3	11
DE	8	3	5	5			5
DK	8		8	9			9
EE	8		8	8		1	9
EL	8	4	4	4			4
ES	8	2	6	6			6
FI	8		8	8			8
FR	8		8	8			8
HU	8		8	8		1	9
IE	8	1	7	7			7

	EU Requirements					National Obligations going beyond EU Requirements		
						Possibilities stated in the EU Act	Possibilities not stated in the EU Act	
IT	8	4	4	4			4	
LT	8	1	7	7		1	8	
LU	8	4	4	4			4	
LV	8	1	7	7		1	8	
MT	8	6	2	2			2	
NL	8		8	8			8	
PL	8		8	8		2	10	
PT	8		8	8			8	
RO	8		8	8		1	9	
SE	8		8	8			8	
SI	8		8	8			8	
SK	8		8	8		2	10	
UK	8		8	8			8	
	216	32	184	185		15	200	

This Table is based on data compiled by the Consortium.

The EU IOs identified in the Directive and Regulation in scope for the Transport Priority Area resulted in 185 national IOs and 15 Possibilities Not stated in the EU legal Act.

As explained in section 2.2.2, in many Member States, the national legislation to implement the Railway Safety Directive came into force after the baseline date of 9 July 2007. Consequently, many of the IOs transposed could not be included in the mapping. This situation applied to most of the IOs in Greece, Italy and Spain. In Luxembourg, the Directive was only partially transposed at the time of mapping, which explains the limited number of IOs mapped. The transposition of some of the provisions of Directive 2004/49 was still pending in Parliament at that time.

In Cyprus and Malta, there has been no transposition as these countries have no railway infrastructure.

The Table below provides the number of Possibilities Not stated in the EU Legal Act as identified in the Transport Priority Area.

Table 9: Overview of Possibilities Not Stated in EU Legal Act

Transport Priority Area	No. of Possibilities Not stated in the EU legal Act	Content Possibilities Not stated in the EU legal Act
BE	2	2
BG	1	1
CZ	3	3
EE	1	1
HU	1	1
LV	1	1
LT	1	1
PL	2	2
RO	1	1
SK	2	2
TOTAL	15	15

This Table is based on data compiled by the Consortium.

Possibilities Not Stated in EU Act due to content

In total, 15 Possibilities Not stated in the EU Legal Act were identified. All Possibilities Not stated in the EU legal Act are related to the content of the IOs. Possibilities Not stated in the EU Legal Act were identified in Belgium, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia, with the most (three) identified in the Czech Republic.

Of the Possibilities Not stated in the EU Legal Act, nine are of the same type and are related to the Railway Safety Directive. They relate to additional requirements when reporting all incidents and accidents, such as reporting to additional bodies, immediate reporting or including small incidents as is described in the revised Module 2 report submitted on 15 September 2008.

Article 19 of Directive 2004/49/EC describes immediate reporting in the event of serious accidents and incidents. The definition of serious accidents and incidents is clearly described in the Directive (Art. 3, (l)). Railway undertakings and infrastructure managers in many Member States are also obliged to report all other accidents and incidents

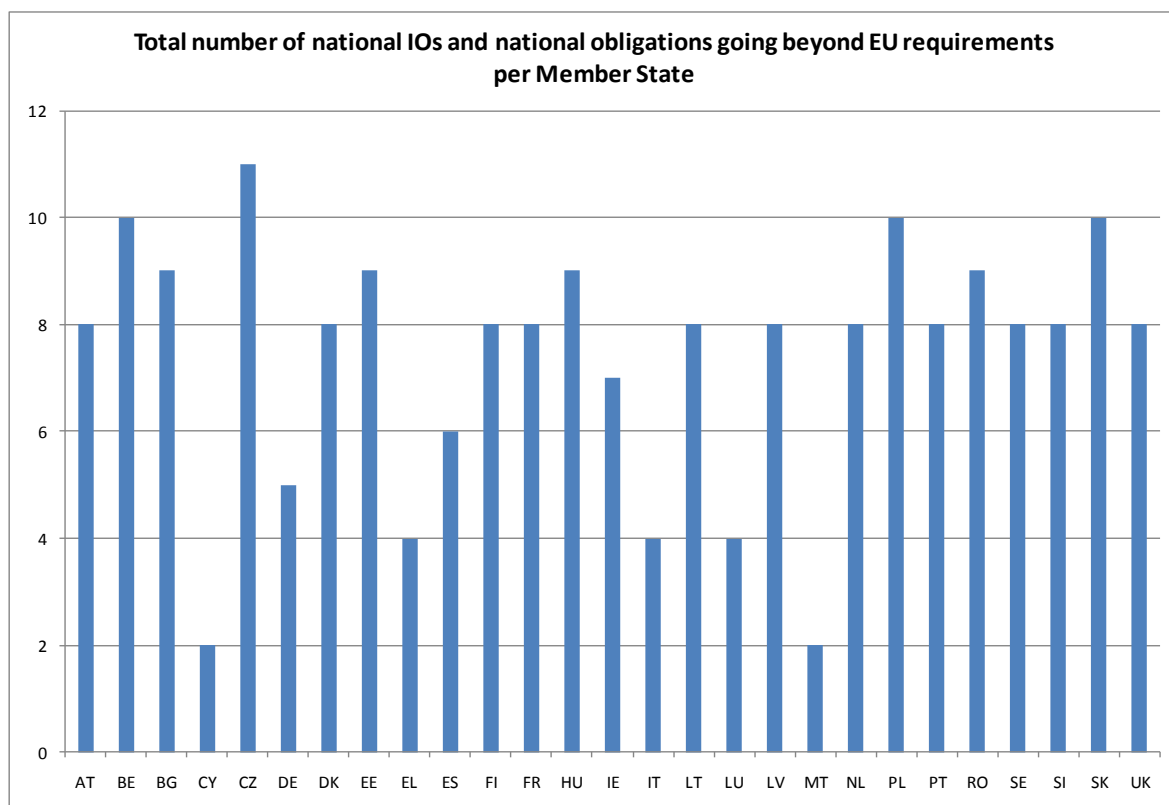
immediately, although European legislation only requires accident and incident reporting on an annual basis in a safety report. It was agreed with DG TREN that if a Member State requires the infrastructure manager and/or railway undertaking to also report all accidents and incidents immediately, then it must be considered as a Possibility Not stated in the EU Legal Act for the safety report IO.

In Portugal, no Possibilities Not stated in the EU legal Act were mapped for the reporting of accidents and incidents because this is laid down in the Law 44/2007 which came into force on 24 August 2007, after the baseline date of 9 July 2007 and was therefore out of scope.

The Figure below provides an overview of the total number of national Information Obligations and Possibilities Not stated in the EU Legal Act¹⁸.

¹⁸ See Section 2.2.1 for Possibilities not stated in the EU Legal Act.

Figure 2: Total number of national IOs and Possibilities Not Stated in EU Legal Act



By Capgemini/Deloitte/Ramboll Management.

2.4 High-level findings of the measurement in the Transport Priority Area

The following section presents the total administrative costs and administrative burdens in Transport Priority Area. This is followed by a differentiated analysis by EU legal Act and by Member State as well as an overview of the most burdensome IOs. This will form the basis for the detailed analysis in the next Chapter.

Table 10: Total number Administrative Costs and Burden

<p>The total administrative cost for the Transport Priority Area is</p> <p style="text-align: center;">€3,104.51 million</p> <p>2.5% of these costs are considered as business-as-usual.</p> <p>Therefore, the administrative burden amounts to €3,026.81 million</p> <p style="text-align: center;">for the Transport Priority Area.</p>
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This Table is based on data compiled by the Consortium.

It should be noted that while it is possible to calculate an indicative total administrative cost and indicative total administrative burden for the IOs under this Priority Area, the measurement covers only a selection of all EU legislation relevant to the Priority Area. Therefore, additional administrative costs and burdens exist that have not been covered by the measurement.

2.4.1 Administrative costs and administrative burdens per item of EU legislation

The 42 pieces of legislation in the 13 priority areas chosen for the measurement exercise within the Action Programme are believed to account for over 80 % of the administrative burden of EU origin¹⁹. Yet, as expected, within this group large differences were to be found in the costs per EU legal Act. The next section contains an analysis of the administrative costs and burdens stemming from the legal acts in scope of the Transport Priority Area.

Administrative burden at EU IO level

Of the two legislative acts in scope, the most burdensome piece of legislation is Regulation (EC) No 561 / 2006 on the harmonisation of certain social legislation relating to road transport. In this Regulation the IO “Recording time spent driving a vehicle and recording working time” is the most burdensome. This piece of legislation accounts for 99.9% of the overall administrative cost of this Priority Area. This is shown in the Table below.

¹⁹ Commission Working Document, 30 January 2008, COM(2008) 35 final, *Reducing administrative burdens in the European Union 2007 progress report and 2008 outlook*, p. 3.

Table 11: Administrative Cost per EU Legal Act broken down by EU Requirements and national obligations going beyond EU Requirements

	EU Requirement	National obligation going beyond EU Requirements 20 Possibility not stated in the EU Act	Total Administrative Costs	Total Administrative Burdens	
	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Burden (€ x 1,000)	Share of Admin. Cost (%)
Regulation (EC) No 561/2006	3,101,848.7	0	3,101,848.7	3,024,158.9	97.50
Directive 2004/49/EC	2,626.8	30.3	2,657.1	2,652.8	99.84
Total	3,104,475.5	30.3	3,104,505.8	3,026,811.8	97.50

This Table is based on data compiled by the Consortium.

The total administrative burden for this legislation is high mainly due to the high population which is affected. The Regulation affects lorries, trucks and buses used for commercial use or to transport nine or more passengers, which adds up to 6.1 million vehicles in the European Union. Every driver has to perform several recording activities each day to comply with the Regulation. This level of recording is not regarded as business-as-usual cost since this information would not be collected and processed by businesses even in the absence of the legislation.

The IO “Recording of time spent and time driving a vehicle” is closely connected to the IO “Notification of exceptional situations of exceeding driving times”. Both IOs affect the same population.

The Railway Safety Directive is the source of relatively high administrative costs for a relatively small population of railway undertakings. This is reflected in the IOs “Application for safety certificate” and “Submission of a safety report”. This safety certificate is issued by all railway undertakings, so the population lies between one for Finland to 150 for Germany. These IOs account for 0.1% of the total administrative cost for this Priority Area. Observations show that costs arise from collecting the documentation and the lack of clear understanding of indicators on what the safety documentation should look like.

²⁰ National obligations going beyond EU Requirements were measured in all Member States.

Administrative burden from Possibilities Not stated in the EU legal Act

The main costs relating to Possibilities Not stated in the EU legal Act are found in the IO “Submission of a safety report”. In general the businesses report more accidents than required by the Directive. At national level, businesses must comply with additional reporting requests or report to organisations other than the investigating bodies. For instance, in Belgium reports have to be issued to both the investigation body and to the Ministry of Mobility. In Bulgaria all incidents, even small ones are reported. This additional requirement increases the number of reports to be produced. A further explanation of the Possibilities Not stated in the EU legal Act can be found in the Module 2 report, which describes the work performed and results gathered for the mapping of the Information Obligations at national level.

2.4.2 Administrative Costs stemming from EU IOs of International Origin

A number of the IOs identified in the EU legislation stem ultimately from international regulation, which has been transposed in EU legislation by the Directives and Regulations in scope of the project. Each EU IO was analysed in relation to any relevant international regulation. In cases where legally binding international regulation had a similar or analogous content to the EU IO, the EU IO was categorised as an EU IO of International Origin.

- The IO’s related to Railway Safety stem from EU origin.
- The IO’s related to social legislation related to road transport stem from international origin.²¹

²¹ In considerations 8 till 11 of Regulation 561/2006 references are made to the AETR. The AETR is a treaty on international goods transport by road which has been concluded in the context of the European Economic and Social Commission of the United Nations in 1970. The European regulations on international goods transport by road, including Regulation 561/2006 and its predecessor, (EC) 3820/85, are building further on the AETR. In EU regulations the juridical fundament is laid down in Art. 69 EC Treaty and Regulation 543/69.

2.4.3 Administrative costs and administrative burdens per Member State

The project offers the opportunity to identify differences in transposing and administering IOs at national level and thus obtain an insight into factors determining the level of administrative costs. This is important in identifying good practice and in learning how the costs for businesses can be reduced.

2.4.3.1 Different methodological approaches

When comparing costs at national level it is essential to recall that the data were collected in three different ways within this project:

- measurement in six Measurement Countries²²
- re-use of existing data in the so-called Baseline Countries²³
- extrapolation to other Member States of the cost data collected (Extrapolation Countries).

The combination of these three different approaches within the project creates special challenges when comparing data, i.e. Baseline Countries which have conducted measurements in the past have chosen different methodological approaches, which reduces the comparability of their results. This has to be borne in mind when reading the following data comparisons.

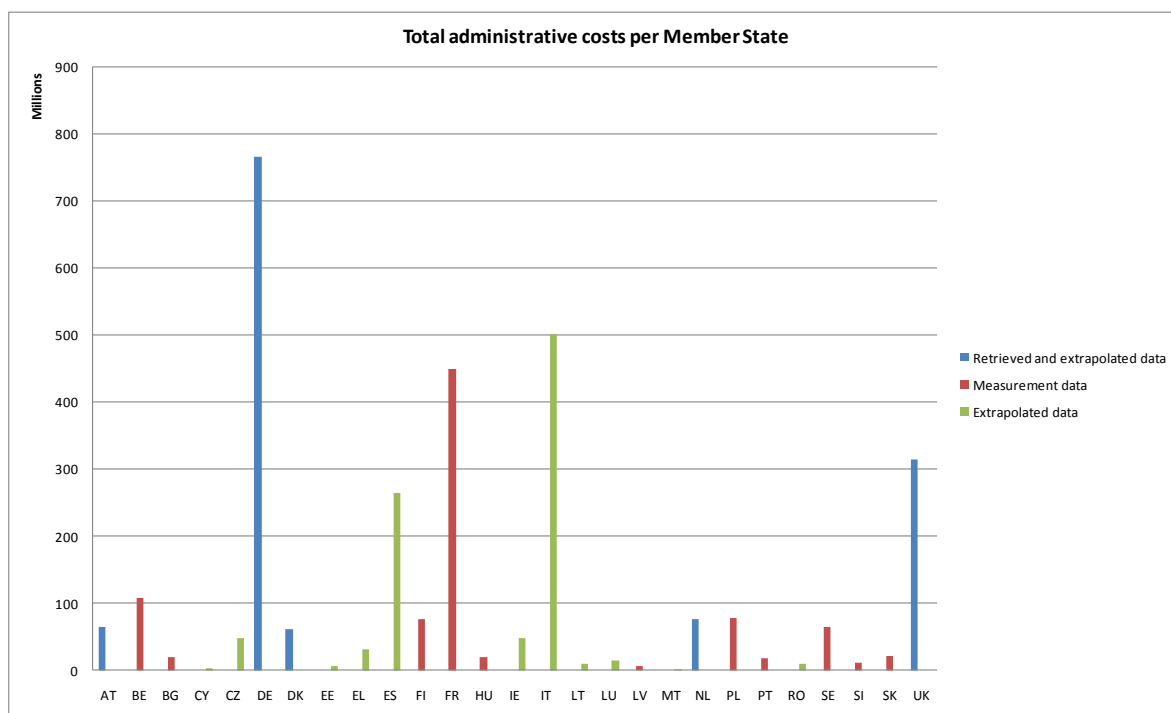
The extrapolated costs are naturally less precise and less detailed than the measured costs. Analyses of specific legislative requirements should therefore only be based on data from countries that have been measured. However, the indicative total impact of EU legislation can be assessed using the extrapolated costs.

²² See Section 2.4.3.2 for Priority Area-specific details

²³ See Section 2.4.3.4 for Priority Area-specific details

The Figure below shows an overview of the total administrative cost by Member State.

Figure 3: Total Administrative Cost per Member State



By Capgemini/Deloitte/Ramboll Management.

The administrative costs are higher in the large countries, France, Germany, Italy, Spain and the UK. This is due to a larger population and wage rates that are higher than in, for instance, Poland, which has almost half the population of Germany. The costs for the UK are lower compared with, for instance, France. The UK is a Baseline Country and in part used another measurement approach, for example in relation to ‘business-as-usual’ costs.

When comparing Belgium with the Netherlands, the figure for the Netherlands is lower than might be expected. Since the Netherlands is a baseline Measurement Country, this is explained by the use during the national measurement of another measurement approach. In addition, the time mentioned as needed for familiarisation and collection of data was higher in Belgium than in the Netherlands.

The administrative costs per Member State are shown in the Table below. The Table covers the administrative costs and administrative burdens (administrative burdens + business-as-usual = administrative costs).

Table 12: Administrative Cost per Member State in the Transport Priority Area

Country	EU Requirement		National obligation going beyond EU Requirements ²⁴		Total Admin. Cost	Total Admin. Burden	
	# of IOs	Admin. Cost (€ x 1,000)	Possibility not stated in the EU Act			Admin. Cost (€ x 1,000)	Admin. Burden (€ x 1,000)
			# of IOs	Admin. Cost (€ x 1,000)			
AT Extrapolated data ²⁵	8	65,052.9	0	0	65,052.9	65,052.9	100.00
BE Measurement data	8	108,880.1	1	3.5	108,883.6	108,882.7	100.00
BG Measurement data	8	20,675.9	1	3.1	20,678.9	20,678.9	100.00
CY Extrapolated data	2	3,525.0	0	0	3,525.0	3,525.0	100.00
CZ Extrapolated data	8	48,676.0	3	0.3	48,676.2	48,676.2	100.00
DE Extrapolated data	5	766,061.4	0	0	766,061.4	766,061.4	100.00
DK Retrieved and extrapolated data	8	62,034.1	0	0	62,034.1	62,034.1	100.00
EE Extrapolated data	8	6,617.9	1	0.3	6,618.2	6,618.2	100.00
EL Extrapolated data	4	31,888.8	0	0	31,888.8	31,888.8	100.00
ES Extrapolated data	6	264,486.0	0	0	264,486.0	264,486.0	100.00
FI Extrapolated data	8	76,972.0	0	0	76,972.0	76,972.0	100.00
FR Extrapolated data	8	450,242.7	0	0	450,242.7	450,242.6	100.00
HU Extrapolated data	8	20,814.1	1	4.9	20,819.0	20,817.7	99.99
IE Extrapolated data	7	47,820.7	0	0	47,820.7	47,820.7	100.00
IT Extrapolated data	4	500,831.7	0	0	500,831.7	500,831.7	100.00
LT Extrapolated data	7	10,455.1	1	0.0	10,455.2	10,455.2	100.00
LU Extrapolated data	4	15,183.7	0	0	15,183.7	15,183.7	100.00
LV Extrapolated data	7	7,426.5	1	0.3	7,426.8	7,426.7	100.00
MT Extrapolated data	2	1,285.1	0	0	1,285.1	1,285.1	100.00
NL Retrieved and extrapolated	8	76,203.8	0	0	76,203.8	76,203.8	100.00

²⁴ National obligations going beyond EU Requirements have been measured in all Member States.

²⁵Data for Austria and Germany is initially retrieved and extrapolated, however, for the IOs measured no data is gathered. Therefore both countries are mentioned having extrapolated data.

Country	EU Requirement		National obligation going beyond EU Requirements ²⁴		Total Admin. Cost	Total Admin. Burden	
	# of IOs	Admin. Cost (€ x 1,000)	Possibility not stated in the EU Act			Admin. Cost (€ x 1,000)	Admin. Burden (€ x 1,000)
			# of IOs	Admin. Cost (€ x 1,000)			
data							
PL Measurement data	8	77,842.1	1	0.0	77,842.1	77,842.1	100.00
PT Measurement data	8	17,668.2	0	0	17,668.2	17,668.2	100.00
RO Extrapolated data	8	10,210.2	1	1.7	10,211.9	10,211.9	100.00
SE Extrapolated data	8	65,504.1	0	0	65,504.1	65,504.1	100.00
SI Measurement data	8	11,954.0	0	0	11,954.0	11,953.9	100.00
SK Measurement data	8	21,160.7	2	16.2	21,177.0	21,177.0	100.00
UK Retrieved and extrapolated data	8	315,002.7	0	0	315,002.7	237,311.0	75.34
Grand Total	184	3,104,475.5	13	30.3	3,104,505.8	3,026,811.8	97.50

This Table is based on data compiled by the Consortium.

2.4.3.2 Measurement countries

The measurement of the IOs took place in six Member States. As stated in section 2.2. Member States chosen for measuring the prioritised IOs in the Transport Priority Area were:

- Belgium
- Bulgaria
- Poland
- Portugal
- Slovenia
- Slovakia.

For two of the IOs, four alternative Measurement Countries were selected since there was not enough experience with some of the IOs for the Railway Safety Directive. This has been

explained in Section 2.2.2. under “Countries where the measurements took place”. The alternative Measurement Countries for these IOs are²⁶:

- Finland
- France
- Hungary
- Sweden.

The following Table lists the costs for the Measurement Countries. The countries are the original six Measurement Countries, along with the four alternative Measurement Countries.

Table 13: Administrative Costs for the six initial Measurement Countries and the four additional Measurement Countries

Country	EU Requirement	National obligation going beyond EU Requirements Possibility not stated in the EU Act	Total Admin. Cost		Total Admin. Burden	
			Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Burden (€ x 1,000)	Share of admin. cost (%)
BE	108,880.1	3.5	108,883.6	108,882.7	100.00	
BG	20,675.9	3.1	20,678.9	20,678.9	100.00	
FI*	76,972.0	0	76,972.0	76,972.0	100.00	
FR*	450,242.7	0	450,242.7	450,242.6	100.00	
HU*	20,814.1	4.9	20,819.0	20,817.7	99.99	
PL	77,842.1	0.0	77,842.1	77,842.1	100.00	
PT	17,668.2	0	17,668.2	17,668.2	100.00	
SK	21,160.7	16.2	21,177.0	21,177.0	100.00	
SI	11,954.0	0	11,954.0	11,953.9	100.00	
SE*	65,504.1	0	65,504.1	65,504.1	100.00	
Total	871,713.9	27,7	871,741.6	871,739.2	99,99	

This Table is based on data compiled by the Consortium.

²⁶ Transport Priority Area, Railway Safety Directive, Issues and Approaches, v1.0.

Measurement data from Finland, France, Hungary and Sweden regarding the Railway Safety Directive has been taken into account, but for the IOs stemming from Regulation 561/2006 with regard to road transport, the data has been extrapolated for these four countries.

IOs from Regulation 561/2006 are responsible for more than 99% of the total administrative costs. The administrative costs for Belgium are the highest. Costs for Slovenia are the lowest, almost one tenth of those in Belgium. Poland has the second highest costs. There are two main reasons for these differences between countries: the population (number of drivers) and wage rates:

- The size of the transport sector is mainly a proportional factor since costs per driver among the countries do not differ very much. The total number of drivers is three times higher in Belgium than in Slovenia. Poland has the highest number of drivers, over two times the number of drivers in Belgium. In general, the population in a country is a fair indicator of the size of the transport sector.
- The wage rates are different between countries. The average wage rate for Belgium is four times higher than that of Bulgaria and Slovenia.

2.4.3.3 Baseline Countries

A central aspiration of the project was to learn from measurements, which had already been undertaken in Member States. These measurements were an important input as they constitute the current “state of play” in those countries which have already carried out work in the SCM field²⁷. Existing measurements were reused whenever possible and efficient. This was mainly the case when complete baseline measurements were available for a Priority Area and where the methodology used in the Baseline Countries was comparable enough to the EU SCM not to distort the extrapolation approach.

²⁷ Wherever possible, data from the national baseline measurements was reused. However, where no comparable data was available the administrative costs were extrapolated. More specific information on the reuse of data from national baseline measurements is provided in the Annex ‘Challenges and constraints of reusing existing data from previous baseline measurements’.

The Table which follows gives an overview of the administrative costs in the Baseline Countries.

Table 14: Administrative Cost for the Baseline Countries – retrieved and extrapolated data

Retrieved and extrapolated data	EU Requirement	National obligation going beyond EU Requirements	Total Admin. Cost	Total Admin. Burden	
		Possibility not stated in the EU Act		Admin. Burden (€ x 1,000)	Share of Admin. Cost (%)
	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Burden (€ x 1,000)	Share of Admin. Cost (%)
DK	62,034.1	0	62,034.1	62,034.1	100.00
NL	76,203.8	0	76,203.8	76,203.8	100.00
UK	315,002.7	0	315,002.7	237,311.0	75.34
Total	453,240.6	0	453,240.6	375,548.9	82.9%

This Table is based on data compiled by the Consortium.

Austria and Germany, which have conducted some baseline measurements, had no baseline data for the Transport Priority Area and are therefore not included in the Table with the administrative costs for the Baseline Countries. The three Baseline countries mentioned above have baseline data for most of the transport IOs and this data has in general been used.

When looking at the data of the Baseline Countries there are no major outliers. However, the administrative costs for the Netherlands are lower than might be expected, e.g. compared to Denmark, which has a population close to half the size of the Netherlands. The scope of the measurement in the Netherlands was narrower. Consequently, not all activities in the IO “Recording of time spent driving a vehicle and recording working time” were measured in the same way as in the Measurement Countries and other Baseline Countries. For example, in the Dutch baseline measurement, the downloading time for the driver card and tachograph were not taken into account. This mainly explains the lower costs in the Dutch baseline.

The UK result is lower than might be expected. This is due to the fact that in the UK the measurement part of the time recording is regarded as a Business-as-Usual cost.

IOs from Regulation 561/2006 are responsible for more than 99% of the total administrative costs. The administrative costs for the UK are the highest; costs for Denmark are the lowest. These differences between countries mainly have two causes: the population (number of drivers) and wage rates:

- The size of the transport sector is mainly a proportional factor since costs per driver do not differ very much by country. The total number of drivers in the UK is more than two times that in the Netherlands and six times higher than in Denmark;
- The UK measurement has accounted for a percentage of the time as Business-as-Usual costs, thus lowering the total costs. Differences in measurements are also shown in comparison with the Netherlands, where low times for the processing of information were observed.

2.4.3.4 Extrapolation countries

As indicated above, the measurement was conducted in a sample of Member States. The results from the Measurement Countries and the Baseline Countries were used to estimate the costs in countries where no measurement was undertaken²⁸. This extrapolation process provided the indicative total costs for European businesses of complying with EC legislation. The Table below shows the administrative costs for the Extrapolation Countries.

Finland, France, Hungary and Sweden are used as additional Measurement Countries for some of the IOs regarding railway safety, and therefore these countries are not presented in the Table with Extrapolation Countries. Austria and Germany are included in the Table with Extrapolation Countries, because the data for Austria and Germany is extrapolated, as no data at all was available on Transport from the Austrian and German baseline measurement. Therefore, they are classified as Extrapolation Countries for this purpose (See also Section 2.4.3.3).

²⁸ The Consortium did however collect population data for all IOs for all 27 Member States.

Whenever the extrapolation model gave rise to results that were not consistent with what might have been anticipated based on economic analysis, this was further discussed with DG Enterprise, with whom a basis for manual extrapolation was agreed.

Table 15: Administrative Cost for the 14 Extrapolation Countries

Country	EU Requirement	National obligations going beyond EU Requirements	Total Admin. Cost	Total Admin. Burden	
		Possibility not stated in the EU Act			
	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Burden (€ x 1,000)	Share of Admin. Cost (%)
Austria	65,052.9	0	65,052.9	65,052.9	100.00
Cyprus	3,525.0	0	3,525.0	3,525.0	100.00
Czech Republic	48,676.0	0.3	48,676.2	48,676.2	100.00
Estonia	6,617.9	0.3	6,618.2	6,618.2	100.00
Germany	766,061.4	0	766,061.4	766,061.4	100.00
Greece	31,888.8	0	31,888.8	31,888.8	100.00
Ireland	47,820.7	0	47,820.7	47,820.7	100.00
Italy	500,831.7	0	500,831.7	500,831.7	100.00
Latvia	7,426.5	0.3	7,426.8	7,426.7	100.00
Lithuania	10,455.1	0.0	10,455.2	10,455.2	100.00
Luxembourg	15,183.7	0	15,183.7	15,183.7	100.00
Malta	1,285.1	0	1,285.1	1,285.1	100.00
Romania	10,210.2	1.7	10,211.9	10,211.9	100.00
Spain	264,486.0	0	264,486.0	264,486.0	100.00
Total	1.779.521,00	2,60	1.779.523,60	1.779.523,50	100.00

This Table is based on data compiled by the Consortium.

IOs from Regulation 561/2006 are responsible for more than 99% of the total administrative costs. The largest countries, such as Germany²⁹, Italy and Spain, have the largest administrative costs. Differences between countries mainly have two causes: the population (number of drivers) and wage rates:

- The size of the transport sector is mainly a proportional factor since costs per driver do not differ very much by country. In general, the population in a country is a fair indicator of the size of the transport sector;

²⁹ Austria and Germany had no baseline data for the Transport Priority Area and are therefore included with the Extrapolation Countries.

- The wage rates are different between countries. The average wage rate for countries such as Germany and Italy is higher than for countries like the Czech Republic, Greece and Romania, and can be up to four times as high.

The exercise of predicting costs through statistical modelling results in cost data with a different level of accuracy compared to the data collected through interviews. The extrapolated costs are for these reasons less precise and less detailed than the measured costs. Analyses of specific requirements should therefore only be based on data from countries that were measured, whereas the total impact of EC legislation and of changes in legislation can be assessed using the extrapolated costs.

2.4.4 Administrative Costs related to Irritation Potential of Most Burdensome EU IOs

The overall objective of the Action Programme is to achieve a reduction in administrative burdens of 25% by 2012. Previous SCM projects at national level have proved that reduction efforts will be seen as especially successful if the public authorities manage to lower the *perceived* burdens for businesses. Thus, two dimensions should be taken into account when analysing how burdensome an IO is:

1. Level of administrative burden
2. Level of irritation for businesses.

The Main Report, covering all priority areas, provides an analysis of the level of irritation for businesses per Priority Area (Priority Area) and cross Priority Areas and countries, also in relation to the level of administrative burden. This paragraph highlights some findings about level of irritation based on the qualitative information gathered during the field measurements and expert interviews. In chapter 3 the findings, as mentioned below, are further explained.

- Irritation on the IO “Recording time spent driving a vehicle and recording working time” stems from a slow download of data extraction from the tachograph, high fees for small violations, the large amount of exceptions for time recording and the time taken to download data from a digital vehicle card. Besides the costs, it is regarded as irritating that tachograph equipment costs a large amount of money despite the fact that the technology is known to be outdated and not user-friendly;

- Much irritation is related to the IO “Application for safety certificate”. Businesses mention that when applying for a safety certificate takes, it takes a great deal of time to collect and adjust the information needed for completing the application. Since there is not much experience with the Directive, high costs are mentioned for familiarisation and collecting documents;
- Safety is a high priority for railway undertakings and infrastructure managers. Businesses understand the need for reporting about serious accident and the need for some investigations. The irritation related to the IO “Reporting of serious accidents and incidents to the investigation body”, lies here in the fact that the Directive requires companies to adjust their business processes and to add more information to their actual reporting. This is regarded as an administrative burden. This also applies to the IO “Cooperation with serious accident investigations”.

3. Legal acts and the IOs

As a general rule, a relatively small number of IOs represent the major part of the cost in any Priority Area and it is therefore worthwhile focusing on these. For the Transport Priority Area all eight IOs are taken into account. The Table hereafter shows the total administrative cost for all EU IOs and the cost of the corresponding national IOs and Possibilities not stated in the EU Act.

Table 16: Total Administrative Cost of EU IOs by EU Requirements and national obligations going beyond EU Requirements

			EU Requirement	National obligation going beyond EU Requirements ³⁰ Possibility not stated in the EU Act	Total	Total Admin. Burden	
EU IO	EU Legislation	Article number	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Cost (€ x 1,000)	Admin. Burden (€ x 1,000)	Share of Admin. Cost (%)
1. Recording time spent driving a vehicle and recording working time	Regulation (EC) No 561/2006	Art. 2; Art. 6 par. 5	3,062,233.7	0	3,062,233.7	2,984,544.0	97.46
2. Notification of exceptional situations in which driving times cannot be met (exemption reasons)	Regulation (EC) No 561/2006	Art. 4; Art. 12	39,614.9	0	39,614.9	39,614.9	100.00
3. Application for safety certificate	Directive 2004/49/EC	Art. 9; Art. 10 par.1; Art. 12 par. 1	1,582.1	0	1,582.1	1,582.1	100.00
4. Submission of a safety report	Directive 2004/49/EC	Art. 9 par. 4	897.3	13.4	910.8	910.8	100.00
5. Application for safety authorisation	Directive 2004/49/EC	Art. 11 par. 1	65.7	0	65.8	65.8	100.00

³⁰ National obligations going beyond EU Requirements have been measured in all Member States

			EU Requirement	National obligation going beyond EU Requirements ³⁰ Possibility not stated in the EU Act	Total	Total Admin. Burden	
6. Submission of a rolling stock technical file	Directive 2004/49/EC	Art. 14 par. 2; Art. 14 par. 3; Art. 14 par. 4	46.4	8.1	54.5	54.5	100.00
7. Cooperation with serious accident investigations	Directive 2004/49/EC	Art. 19; Art. 20	33.3	0	33.3	31.6	94.76
8. Reporting of serious accidents and incidents to investigation body	Directive 2004/49/EC	Art. 21 par. 3	2.0	8.7	10.7	8.2	76.65

This Table is based on data compiled by the Consortium.

The most burdensome IO is the IO “Recording time spent driving a vehicle and recording working time” of Regulation (EC) No 561/2006. This IO accounts for 98.6% of the administrative costs. For this IO, recording devices or tachographs are used by every driver³¹. The IO “Notification of exceptional situations in which driving times cannot be met (exemption reasons)” is linked to this IO. These notifications are made by writing the exemption reasons on the analogue disc or print-out when using a digital tachograph. This activity is performed on a regularly basis by the driver.

For the Railway Safety Directive 2004/49/EC, the IOs “Application for a safety certificate” and the “Submission of a safety report” cause the highest administrative costs. The main reason for the high costs for the “Application for the safety certificate” is the collection of documents. It was also observed that familiarisation and adjusting the report to a defined format takes a lot of time. In addition, the submission of the safety report is time-consuming on a yearly basis, which leads to high costs. Infrastructure managers consider

³¹ A tachograph is a recording device fitted in the dashboard which permanently records the speed of the vehicle, the total distance travelled and the distance between stops, the driving time and standing time.

the IO “Application for safety authorisation” to be very time-consuming, but the total costs at country level are limited. This is due to the fact that the target group here is very small.

The two pieces of legislation are aimed at totally different parts of the transport sector. Regulation 561/2006 involves a high population with lower wage employees, whereas Directive 2004/49 involves a relatively small population with higher wage employees, such as managers and professionals.

As the total administrative costs and burdens are indicative because they include extrapolated data, the most burdensome IOs are analysed on the basis of the detailed data collected in the six Measurement Countries only. In the section hereafter, each of these IOs is described in detail in relation to the following topics:

- Explanation of the legal aspects of the IO
- Underlying steps in the business process
- Overview of the cost parameters
- Reasons why the IO is burdensome/irritating
- Segmentation (if applicable)
- Data requirements (if applicable)
- Demarcation between the burdensome IO and closely related IOs (if applicable)
- Business-as-usual costs
- Potential reduction measures.

The IOs are structured by legal act.

3.1 Regulation (EC) No 561/2006 on the harmonisation of certain social legislation

Tachographs, or as the legislation calls them ‘recording equipment’, are used to review the driving and rest time of drivers. They are mandatory for vehicles allowed to carry a total weight of over 3.5 tonnes and vehicles built to carry at least nine passengers if the vehicle is used for commercial purposes.

Tachographs have evolved over time, shifting recently from analogue to digital recording devices. The analogue units record the driver’s periods of duty on a waxed paper disc – a tachograph chart. These are not always interchangeable between the different units and

are vulnerable to damage and tampering. Experience has shown that analogue tachographs are easy to tamper with (paper disc not used, destroyed, withdrawn during journeys, parameters mechanically or electromagnetically altered, etc...). In order to put an end to the most common abuses to the analogue system, the Commission proposed to introduce new advanced recording equipment, consisting of a digital vehicle unit and a personal driver card. The main objectives of the new digital tachograph are to:

- a) improve enforcement,
- b) enhance fair competition,
- c) increase road safety, and
- d) maintain satisfactory social standards.

These goals are reflected in the statement:

*“Whereas blatant infringements and fraud present a road safety hazard and are unacceptable for reasons of competition for the individual driver who does respect the rules”.*³²

As of 1 May 2006, it became mandatory for transport businesses to install digital tachographs in their new vehicles, thus gradually replacing the paper discs with digital smart cards.

The target groups affected by Regulation (EC) No 561/2006 on the harmonisation of certain social legislation include companies such as transport businesses, bus drivers, consigners, freight forwarders, tour operators, truck drivers, principal contractors, subcontractors, driver employment agencies and other businesses using transport for commercial use³³.

³² DG TREN: Introduction of the digital tachograph.

³³ Regulation 561/2006, Article 2, with exceptions in accordance with Article 3 and as excluded by the Member State in accordance with Article 13.

3.1.1 IO1 “Recording time spent driving a vehicle and recording working time”, Regulation (EC) No 561/2006 Art. 2, Art. 6 par. 5

3.1.1.1 Characteristics of the IO

As a result of Regulation (EC) No 561/2006, new vehicles contain digital tachographs.³⁴ The biggest difference between the analogue tachograph and the digital tachograph is the use of a smart card instead of record sheets (often called charts, discs, tachos) used in analogue tachographs³⁵. The data on the driver card is extracted at least once every 28 days. The data on the tachograph installed in a vehicle itself, containing the vehicle’s data, has to be extracted at least once every three months.

Segmentation, target group and costs

It is assumed that in 2012 most of the transport sector will be using digital equipment. In the transition period since analogue tachographs are gradually disappearing and digital tachographs are coming in. The following segmentation is used:

- Businesses driving vehicles with analogue tachographs
- Businesses driving vehicles with digital tachographs.

The target group covers drivers of a wide range of vehicles. The target group includes businesses such as transport businesses, bus businesses, consigners, freight forwarders, tour operators, truck drivers, principal contractors, subcontractors, and driver employment agencies.

Member States have the possibility of excluding categories of vehicles from using tachographs, for example, vehicles used for transport of milk or food to and from farms. These exemption categories are in Article 13 of the Regulation³⁶. It is within the

³⁴ 561/2006 Article 27, sub 1.

³⁵ www.digitaltachograph.gov.uk.

³⁶ Article 13 (1) of Regulation (EC) No 561/2006 sets out a list of possible national derogations from the application of provisions on driving times, breaks and rest periods (Articles 5–9 of the Regulation). It is within the competence of each Member States to decide whether any of the listed

competence of each Member State to decide whether any of the possible national derogations listed will be granted or not.

With the coming into force of Regulation 561/2006, a number of exception categories of vehicles and businesses were restricted or deleted. This caused costs for installing, training and setting up the business processes around the tachograph for these businesses that now also fall under the new regime.

3.1.1.2 Process for complying with IO

The business process for recording the time spent driving a vehicle is quite standard throughout businesses in the Member States and no significant differences were noted in the business process of time recording. The processes for recording of time spent using an analogue and digital tachograph are presented below.

Analogue tachograph

The tachograph records different types of activities, such as: 1. Driving, 2. Available time (idle time), 3. Other work, 4. Break, 5. Rest. The analogue discs may be processed at the company and include activities such as scanning and archiving³⁷.

possible national derogations will be granted or not. (Source: http://ec.europa.eu/transport/road/policy/social_provision/social_driving_time_en.htm). This list provides categories with small impact. There is no existing data on the population of vehicles to which the exceptions apply. In agreement with DG TREN, it has been estimated that this affects no more than 5% of the total population and these have therefore been left out.

³⁷ Processing of the tachograph discs is not part of the main process and therefore not included in the measurement. This processing takes place between process steps 4 (hand over copy of driving time overview) and 5 (store tachograph discs).

Figure 4: Business process for "Recording time spent driving a vehicle and recording working time, analogue tachograph"



By Capgemini/Deloitte/Ramboll Management.

In general, the following activities must be carried out with analogue tachographs in order to comply with the Regulation:

1. Insert tachograph discs into analogue tachograph;
2. Record time spent driving a vehicle and record working time;
3. Look up the time spent per activity to monitor on time spent;
4. Hand over copy to transport company. The driver must keep tachograph discs for at least 28 days for inspections available in the vehicle. After this, the discs are handed over to the transport company for further processing;
5. The tachograph discs are kept for at least 12 months and must be accessible for inspection from the premises of the company.

What this involves in more detail is that before inserting the tachograph disc into the tachograph, the driver writes his/her name, date and mileage on the disc and each day the driver inserts a new disc into the tachograph. Time recordings are printed on the tachograph disc along with speed details. During the day, a driver will have to monitor the driving time to avoid abuse of the Regulation. After the working day, the driver extracts the tachograph disc and stores it to show in the event of an inspection on the road. Periodically the tachograph discs are handed over to the transport company for further processing. Often the discs are scanned and registered by the transport company. The cards are stored for one year for inspection purposes. After this period, the data may be stored for a longer period for tax reasons.

Digital tachograph

In general, the business processes for the analogue and digital tachograph do not differ greatly, except in the way the recording device and input are handled and processed. In

general, the following activities must be carried out with digital tachographs in order to comply with the Regulation:

1. Insert driver card into digital tachograph
2. Record time spent driving a vehicle and record working time
3. Download driving time details from driver card
4. Download data from the device (tachograph)
5. Save details in transport businesses database
6. Store all data downloaded from both the vehicle unit and driver card for at least 12 months following recording
7. Should an inspecting officer request it, ensure data is accessible, either directly or remotely, from the premises of the company.

What this involves in more detail is that a driver needs to have a personal driver card. The driver inserts this card into the digital tachograph and logs on. The driver is led through a menu to provide basic information, which does not take much time when the trip is routine. During the trip, the driver manually adjusts the tachograph to change the time recording status to rest times, idle times and driving times. Drivers monitor their driving time in the course of the day in order to avoid breaching the rules. Every move the vehicle makes must be recorded, even if it is only a very short move. The driving details on the driver card are extracted at least once every 28 days. The driving details of the vehicle stored in the recording device are extracted once every three months. In the event of an inspection during the transport, a printout is made or the card is read out with the driving time details from the last 28 days. After extraction, the data is processed and stored within the company for at least one year. After this period, the data may be stored for a longer period for tax reasons.

The data on the driver card and the tachograph device is extracted at a download station. These are mainly located at the transport company, but they can also be in other locations. The time for the download is considered to be substantial: 20–30 minutes per download. If many drivers want to have their data downloaded, for example on a Friday afternoon, there can be queues in front of the download station.

In addition to the downloading of driver card data, another data extraction has to be taken into account. This is the extraction of data of the tachograph installed in the vehicle at least every three months.

The Figure below presents the business process for the digital tachograph.

Figure 5: Business process for "Recording time spent driving a vehicle and recording working time, digital tachograph"



By Capgemini/Deloitte/Ramboll Management.

With the digital equipment, all the data can be uploaded to a central information system/database.

3.1.1.3 Costs and explanatory variables

In general, the total costs per country are high due to the large population of the transport sector and the equipment costs, which are standardised between countries. Differences in wage rates are largely responsible for differences in total costs between countries. This is explained in the following sections:

- Population (Qs) and segmentation
- Equipment costs for analogue and digital tachographs.

Population (Qs) and segmentation

The population is the number of drivers driving a vehicle with an analogue or digital tachograph³⁸. Every driver has to perform several activities related to recording each day to comply with the Regulation. There is obviously a strong connection between numbers of drivers and numbers of vehicles. There are in total over six million vehicles in the EU. This

³⁸ See for calculation and assumptions Annex 5.1.

large population includes lorries, trucks and buses used for commercial use or to transport nine or more passengers. Numbers per country are shown in Annex 5.

Per country, another division is used for the analogue and digital segments. Germany, the Netherlands and Sweden have for example a relatively high percentage of drivers using a digital tachograph, on average 40%. In Bulgaria, Greece and Poland, the percentage is low. The figures and assumptions on the relationship between analogue and digital tachographs are in Annex 5.1.

Since the use of digital tachographs is mandatory for new vehicles, the percentage of digital tachographs will increase in all countries over time and the percentage of analogue tachographs will drop to nothing.

Equipment costs for analogue and digital tachograph

For analogue tachographs the equipment costs include the recording device, including maintenance and tachograph discs. For digital tachographs the equipment costs include the recording device, including maintenance, along with print rolls and card readers. Digital tachographs also require software for downloading and basic processing, the cost of which can be spread over multiple vehicles. The cost of the purchase of the hardware is not considered as a one-off cost, as the equipment must be renewed when it has reached the end of its lifecycle, usually at the same time as the vehicle.

In general, equipment costs differ depending on the size of the transport company. Where there are one-off purchases, like the card reader or software for processing the data, these costs can be spread over a larger amount of vehicles in the case of larger businesses and this will lower the costs per vehicle. The equipment costs calculated are based on an average transport company. In Europe, there are not many suppliers of tachographs and prices for tachographs and software have been shown to be very similar for all the countries. Therefore a standard amount per driver per month is used for all countries based on a standardised calculation of equipment costs.

Prices for analogue tachographs range from €300 to €425, and for digital from €380 to €915 depending on the type. For the analogue tachographs, there is a market for second-

hand devices, which lowers prices. Tachograph readers cost about €340. The estimated monthly costs per vehicle are €4.80 for analogue tachographs and €7.20 for digital tachographs³⁹, representing costs over ten years of about €575 for drivers using analogue tachographs and €870 for drivers using digital tachographs. This standard measurement is calculated based on several assumptions, which further explored in Annex 5.1 of this report.

Business-as-usual costs

There are no 'business-as-usual' costs included in the total costs. Although some businesses may use the tachograph for other purposes, businesses mainly stress that this is because they are obliged to use a tachograph and make the best of it. Without being obliged to register time with a tachograph, they would not choose to use a tachograph for data processing. In general, businesses prefer to use data from their onboard computers, which reflect information faster than a tachograph can. However, sometimes businesses use the tachograph data for comparison with data from timetables or onboard computers, but not as a primary source of data.

Although no business-as-usual is mentioned, for the IO "Recording time spent driving a vehicle and recording working time", the drivers do not feel that the daily recording of time is very burdensome. They mention a low actual impact on their work. The actual impact of downloading of tachograph data is also mentioned as low. The time between the start and finishing of the extraction of data can be used for other activities, which may be social or work-related. During interviews, drivers mentioned that the time spent on downloading is used for the administration or for management issues, such as reports, schedules, and for social contacts. Although these remarks reflect the actual impact on companies, this is not taken into account in the research outcomes.

The Table below shows the measurement data from the six Measurement Countries for the IO "Recording of time spent driving a vehicle and recording working time" for the

³⁹ See Annex 5.1 for calculation equipment costs tachograph.

segments analogue and digital tachograph. The measurement results for analogue and digital tachographs are presented separately.

Table 17: Total Administrative Cost of EU IOs in the Measurement Countries – “Recording time spent driving a vehicle and recording working time” – analogue tachograph

“Recording time spent driving a vehicle and recording working time”, Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85 (Text with EEA relevance) -, Art. 2; Art. 6 par. 5						
Segment: analogue tachograph	Measurement countries					
	BE	BG	PL	PT	SK	SI
Internal time per driver per month (minutes)	140	142	147	123	154	126
Average hourly tariff (€)	21.00	1.54	5.00	7.00	4.00	7.02
Equipment Cost per driver per month (€)	5.00	5.00	5.00	5.00	5.00	5.00
Consulting Cost per driver per month (€)	0.00	0.00	0.00	0.00	0.00	0.00
Dominant employee type ⁴⁰	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers
No. of vehicles	119,614	173,043	337,649	63,046	90,201	35,829
Frequency (times per year)	12	12	12	12	12	12
Total Admin. Cost per driver per month (€)	54.00	8.63	17.25	19.35	15.23	19.75
Total Admin. Burden per driver per month (€)	54.00	8.63	17.25	19.35	15.23	19.75
Total Cost (€)	77,509,872.00	17,927,254.80	69,893,343.00	14,639,281.20	16,488,742.80	8,491,473.00

This Table is based on data compiled by the Consortium.

⁴⁰ The dominant employee type represents a standard typology from the ISCO standard, representing a wage level comparable to that of the employees involved, such as drivers and clerical staff. The employee type ‘plant/machine operators, assemblers’ is one type.

Collection of data for this IO was based on segments. The total cost per entity presented in this Table is calculated per IO as: (sum of total costs across segments)/(sum of number of occurrences across segments).

Table 18: Total Administrative Cost of EU IO in the Measurement Countries – “Recording time spent driving a vehicle and recording working time” – digital tachograph

“Recording time spent driving a vehicle and recording working time”, Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85 (Text with EEA relevance) -, Art. 2; Art. 6 par. 5						
Segment: digital tachograph	Measurement countries					
	BE	BG	PL	PT	SK	SI
Internal time per driver per month (minutes)	118	152	97	106	161	104
Average hourly tariff (€)	21.46	1.54	5.00	7.00	4.00	10.69
Equipment Cost per driver per month (€)	7.00	7.00	7.00	7.00	7.00	7.00
Consulting Cost per driver per month (€)	0.00	0.00	0.00	0.00	0.00	0.00
Dominant employee type	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers
No. of vehicles	48,319	19,227	41,508	11,693	21,324	10,375
Frequency (times per year)	12	12	12	12	12	12
Total Admin. Cost per driver per month(€)	49.20	10.90	15.08	19.37	17.73	25.49
Total Admin. Burden per driver per month (€)	49.20	10.90	15.08	19.37	17.73	25.49
Total Cost	28,527,537.60	2,514,891.60	7,512,948.00	2,717,453.20	4,536,041.28	3,173,920.00

This Table is based on data compiled by the Consortium.

Equipment costs are higher for the digital tachograph as mentioned before.

There is not very much difference in time spent for companies using analogue or digital tachograph. The use of digital tachographs indicates a shift in workload from the driver recording time to the downloading and processing of information. In four of the six Measurement Countries, the time needed for recording time with a digital tachograph came down by more than the extra time needed for the downloading and processing of the information. For these countries, the time spent where a digital tachograph is used is lower than for an analogue tachograph. For two countries (Bulgaria and Slovakia), the companies reported that for digital tachographs much more time is needed for back office activities, leading to higher time spent for digital tachographs in comparison with the analogue tachograph.

Variables that can influence the time spent are:

- General differences in administrative costs between analogue and digital tachograph
- Differences due to business structure
- Differences between small, medium-sized and large businesses
- Differences in administrative costs due to national requirements
- Expectations on future cost trends
- Normally efficient business.

General differences in administrative costs between analogue and digital tachograph

The IO “Recording time spent driving a vehicle and recording working time” consists of activities for the driver and for administrative personnel. For both segments the main part of the time spent is for the actual recording of time spent, i.e. extracting the recorded data and back-office processing of the time. There is a shift in workload when using digital tachographs rather than analogue tachographs. The following shifts in workload should be noted:

- The start of the process takes longer for the driver when using digital tachographs. There is further additional time when there is a change of drivers. All initial information on the route and mileage of the vehicle has to be re-entered. For analogue machines, the process of inserting a different tachograph disc is much quicker;

- For recording the time actually spent during the transport journey, time spent decreases when using a digital tachograph. The time needed for the actual time recording has come down. In addition, the time needed to cooperate with inspections has decreased since the time spent is recorded on a paper print-out or the driver card is inserted in a mobile reader device, which immediately shows the time craven, thus reducing the time for analysis of the time recorded by the official;
- On the other hand, for certain activities the time needed increases when using digital tachograph. The time for the extraction of the information recorded (download time) has increased along with time needed for submission of information. Downloading the data takes between 20–30 minutes per month per driver card, whereas with an analogue tachograph, it is just a case of taking the disc out. Moreover, in the case of the digital tachograph, the data needs to be extracted from the tachograph itself at least every three months;
- Finally, data retrieved from the digital tachograph needs some basic processing to be stored properly such as a basic check and filing.

As can be seen above, the use of digital tachographs involves a shift in workload from the recording or time by the driver to the downloading and processing of information. This reflects a shift in activities from the driver to the back office in the same company.

An explanatory variable for different total costs for the IO per country is the extent to which digital tachographs have been introduced. Digital tachographs have higher equipment costs than analogue tachographs as explained in section 3.1.1.3 and Annex 5. In addition, times per vehicle per month between the segments differ. The percentage of analogue and digital tachographs is further explored in Annex 5.1.

Differences due to business structure

In Poland, the overall time mentioned is low compared to other countries for the segment ‘businesses using digital tachographs’. The most important explanation that the interviewees mentioned is that the time spent recording each time has dropped, e.g. the statement that *‘Pushing the button takes just a split second’*. This may reflect the decrease in time and a reduction in the ‘feeling of time’. Another explanation is that the Polish

businesses interviewed mentioned increasing efficiency for the back office in registering the data from the digital tachograph and the driver card. Time dropped from 40 minutes for adding new information to 30 minutes for adjusting information, a saving of 25%.

If the journey goes to a destination outside the EU, complying with the 28-day period for extracting the driver card data is seen as difficult. These journeys may take longer than this, causing problems for a small number of transport businesses. For example, in Bulgaria, drivers transporting goods to and from countries such as Spain extract data from the driver's card every two weeks, since transportation to Spain takes two weeks for one round trip. Extracting the data every two weeks avoids the risk of exceeding driving times when driving two transports of two weeks each. But for these businesses, the cost of downloading data from the driver's card doubles.

Differences between small, medium-sized and large businesses

There are some challenges, especially for small businesses, working with the digital tachograph. Sometimes businesses do not have the necessary equipment to extract the data from the driver card and/or to empty the digital tachograph. These are mainly small businesses with 1 or 2 drivers. In order to comply with the legislation, these businesses download their data at a so-called 'downloading point'. Such a downloading point can be established at another transport business or at service stations, which often have extraction equipment with limited functionality. This provides limited access to the possibilities of data processing provided by specialised software. Companies may have to make larger detours and drivers are less able to utilise the time spent downloading for other activities since they are not at their own company's premises.

Larger businesses often lease their vehicle park, including the tachographs. This will result in analogue tachographs being replaced by digital tachographs within five to six years in these companies.

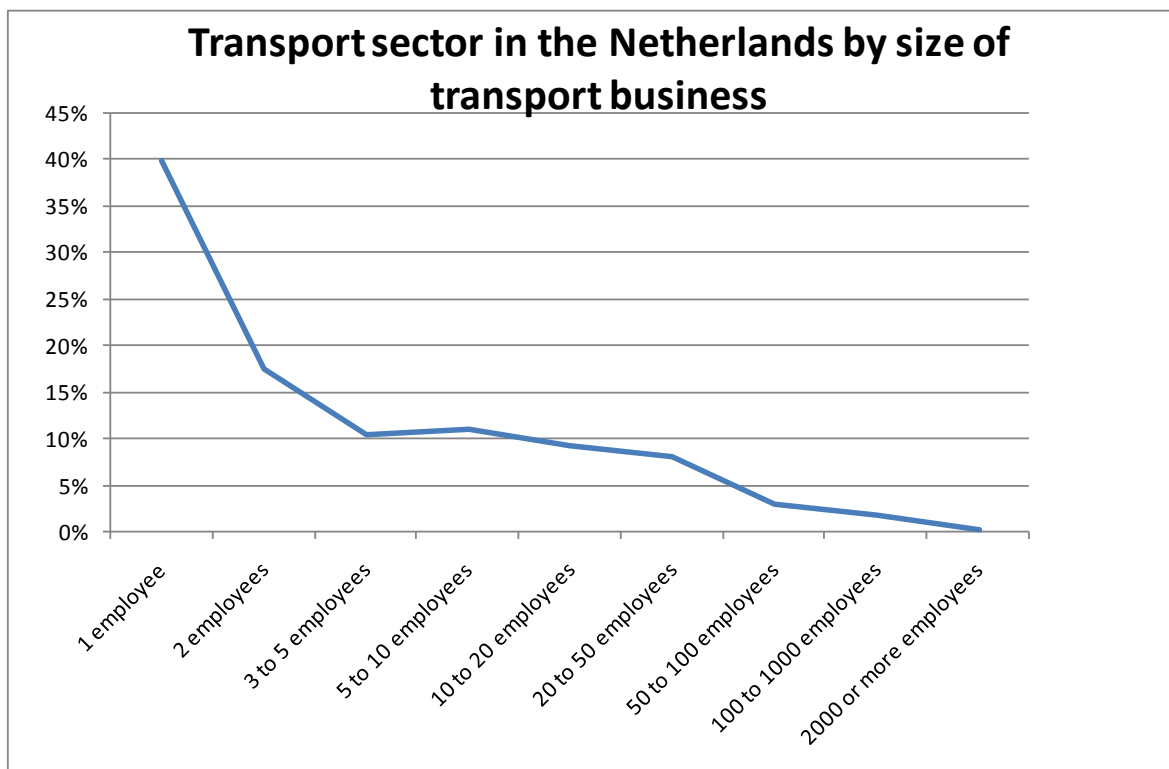
Due to their size, large businesses are able to make use of their scale and provide good equipment and planning support to their drivers. One of the top five Dutch businesses described queues of tens of vehicles waiting for their turn for extraction. This has resulted in strict planning of download intervals for all vehicles in order to avoid these queues.

When using modern software the extraction schedule is incorporated into the business processes, delivering major benefits in relation to competitors. Large businesses also often have long-term contracts with their customers. These provide predictable transports, which enables them to provide suitable logistical planning for their drivers, including for downloading their tachographs. This is not so easy for smaller businesses and drivers, who are in general more dependent on occasional loads.

For smaller businesses in general, it is less attractive to use a digital tachograph because of the additional costs for software, which are relatively high in relation to the small number of employees. In the Figure below the transport sector of the Netherlands is provided as an example on how the sector is organised.⁴¹ The slope is representative of transport sectors across other Member States. The small companies, with only one driver, represent 40% of the companies. Businesses with 2 to 5 employees account for 28% of the market. Companies with more than 100 employees account for only 2% of the sector.

⁴¹ Based on figures from the CBS, Centraal Bureau voor de Statistiek, of 'Bedrijven; grootte, rechtsvorm en economische activiteit', selection SBI'60 'Transport over land'. Figures are averages of 2007 and 2008.

Figure 6: Transport sector in the Netherlands by size of transport business



Source: Consortium from Dutch Centraal Bureau voor de Statistiek data.

Differences in administrative costs due to national requirements

In countries like Slovenia and Bulgaria, driving times are registered twice in different formats due to other national legislation, for example other (national) social legislation. Although the costs involved with the double registration are not part of the administrative burden related to the European legislation, they are worth mentioning here. For the businesses involved, it means a double workload.

Remarks were made by businesses about the differences they experienced in the number of controls between countries. For example, Bulgarian drivers mention that Bulgarian drivers are more frequently inspected in certain countries. Another example is the more intense inspections in France. It is not clear whether this is just an impression or real,

since Member States have agreed on certain levels of inspections to prevent different inspection regimes under Directive 2006/22/EC⁴².

Expectations of developments

There are some developments that are expected to have impact on cost drivers for analogue and digital tachographs. Several business and umbrella organisations predict that the higher costs for digital tachographs and the poor experience, such as the longer time needed to process the data, will decrease over time. Explanations mentioned are:

- Improvements in tachograph technology. It was mentioned that the early models did not provide the opportunity for a fast download, or information sharing with onboard computers, or wireless transmission. These improvements might become available in new models accompanied by legislative changes allowing these techniques to be used;
- The activities will become more routine, reducing time for regular business processes and reducing the risk of making mistakes.

Effect of the use of digital equipment on business processes outside the scope of the IO

The use of digital equipment has a positive effect on business processes beyond the scope of the IO measured. According to Art. 10, sub. 2 the company has a responsibility for checking on compliance of driver times with the Regulation. For analogue tachograph discs a company can use an automatic means of reviewing the discs. The discs are scanned and reviewed by software which can indicate violations. However, this process requires manual intervention and the data can only be used for reviewing. When using digital equipment the extracted data is loaded into processing software which generates automatic reports. This process is quicker and more accurate, and the possibilities for reporting and processing data, for example cross-referencing the data with other data, or use for other purposes have increased significantly.

⁴² Directive 2006/22/EC on minimum conditions for the implementation of Regulations (EEC) 3820/85 and 3821/85.

3.1.1.4 First simplification suggestions

During the interviews and workshops with business and experts, several initial simplification ideas were collected. A structured and detailed collection and analysis of possible reduction measures is being conducted during Module 5. Thus, this section only contains a summary of the suggestions gathered and does not represent a final list of simplification suggestions nor does it represent the point of view of the Consortium.

Suggestions for reducing the costs can be found below. The suggestions set out there are mainly extracted from remarks made by businesses.

Software and hardware improvements

The suggestions which follow relate to technical improvements in the digital tachograph. Some of these recommendations are also addressed by the SMART programme (see 4.2 below). This programme aims to amend and improve the Annex 1B of Regulation (EEC) 3821/85, which regulates the digital tachograph system in Europe, by proposing potential improvements to the current tachograph legislation and solutions for stabilising the first generation of digital tachograph/tachograph cards⁴³. Moreover, as technologies evolve, of the suggestions may be already available in some tachograph models:

- Make broader use of wireless extraction and submission of data from the mass storage of the tachograph and the driver's card to the back office instead of requiring the vehicle to dock physically. This would be a major time and burden reduction;
- Reduce the downloading time for the driver's card by adapting and using new techniques such as high-speed (USB) connections;
- Reduce the time needed to empty the card by decreasing the frequency required for downloading, e.g. from at least once every 28 days to at least once every 40 days, or make data extraction possible at more locations across Europe. This would facilitate long distance transport and imply fewer detours to download stations, and would reduce detours for drivers who do not have their own extraction equipment;

⁴³ See also Section 4, Conclusion and Outlook.

- Allow the use of data from the onboard computer. Many vehicles use an onboard computer for business processes such as recording driving times and navigation. Using this data instead of the tachograph would reduce equipment costs.

Legal:

- As mentioned in section 3.1.1.1 it is within the competence of the Member States (Article 13, sub 1) to exclude certain categories of vehicles. The EC could play a role in stimulating or researching:
 - Use of exception categories by Member States and increasing the radius, for example, of vehicles used in agricultural activities and driving less than 100 km;
 - Increase exclusion of certain businesses (category < 7.5 tn) from the Regulation. For example, certain trade/craft businesses that drive a limited amount of kilometres per day since transport is not their main activity. Currently, Member States can exclude this category of businesses if they do not exceed a radius of 50 kilometres. In practice most of these trade/craft businesses will exceed this radius limitation of 50 kilometres and it could be very valuable to investigate whether this radius should be increased⁴⁴;
- Consider increasing the maximum interval between downloads from 28 days to at least 40 days, thus lowering the frequency of downloads;
- Use one standard format for tachograph recording files. Different formats (extension of data file) currently exist between France, Spain and other Member States. In the UK, a slightly different format is used for data. Drivers from other Member State have to insert a pre-digit 00, 01 or 02 before they enter their personal numbers, thus increasing the chance of error.
- Align national legislation with European legislation and avoid double registration of driver times in different formats for different purposes. This is within the responsibilities of the Member States.

⁴⁴ Recommendation mentioned during measurement and also in the Position Letter of the Zentralverband des Deutschen Handwerks, 21 August 2008.

- Allow the driver instead of the company representative to draw up and sign the document explaining why the driver does not have the discs or was not working in a vehicle coming under the Regulation and his time not driving a vehicle exceeded 24 hours. Currently, the document has to be signed by the employer or another responsible entity. This provision is especially burdensome for large businesses which employ many drivers because they have to deliver this document to wherever the driver is. This means that the driver has to send a large number of documents by fax on a weekly basis⁴⁵.
- An alternative to the suggestion 'Allow a driver instead of the company representative to draw up and sign the document explaining why the driver does not have the discs or did not work in a vehicle or was not working in a vehicle coming under the Regulation and his time not driving a vehicle exceeded 24 hours is to remove the obligation to fill in the form.

Incidental reduction proposals

- Reduce costs for printing by providing equipment to inspectors and the police so they can perform a mobile read-out of the tachograph;
- Shift the recording and storage from the back office to the driver, thus decreasing the time spent on processing and storing data in the back office. This proposal made by businesses will decrease time spent on processing data at the back office.

⁴⁵ A non-mandatory form has been drawn up presented by the European Commission: Form of attestation of activities,
http://ec.europa.eu/transport/road/social_provisions/form_attestation_activities_en.htm

During interviews some comments were made by the interviewees to express their point of view on the legislation. Some of these comments are provided below to underline the findings of the report.

- *'I wonder why we receive a manual of 140 pages for the tachograph. Why do we have to rewrite it to one or two pages to make it suitable for our drivers?'*
- *'My drivers stop their trucks in order to comply with the driving times, even if this means they do not provide service to a customer. This causes delay, planning problems and a decrease in service. I do understand my drivers, since they pay their own fine, but I have to pay for not serving my customers!'*
- *'Why are the digital tachographs not foolproof? Data is overwritten after a while, there is no prevention mechanism for inserting the wrong company card and there are too many exceptions.'*

3.1.2 IO2 “Notification of exceptional situations in which driving times cannot be met (exemption reasons)”, Regulation 561/2006 Art. 4; Art. 12

3.1.2.1 Characteristics of the IO

If a driver is unable to meet the driving times, they have to indicate a reason why they were unable to do so. This notification is not recorded automatically in the tachograph. Drivers must record the reason for the exemption manually on a record sheet, and on the back of the analogue disc or on a printout from the digital recording equipment. This information must then be presented to an inspection officer or police officer when required during inspections.

The notification made is a requirement closely linked to the IO “Recording time spent driving a vehicle and recording working time”. Because of this relationship, the same segmentation is used:

- Businesses driving vehicles with analogue tachographs
- Businesses driving vehicles with digital tachographs.

3.1.2.2 3.1.2.2 Process for complying with IO

The activities consist of making a notification to explain why driving times are exceeded. This is done either by writing the reason for the exception on an analogue disc, or by creating a printout from a digital tachograph and writing the reason for exemption on the printout. The discs or printouts are stored in the vehicle for inspections. They are then

handed over to the transport company for further processing and storage. The period of storage of the tachograph discs or printouts is the same as for the IO “Recording time spent driving a vehicle and recording working time”.

The activities in the process are:

1. Make notification of the excessive driving time on the disc or printout
2. Register motivation for exemptions on record sheet
3. Store notifications
4. Hand over record sheet to the officer.

Figure 7: Business process for “Notification of exceptional situations in which driving times cannot be met”



By Capgemini/Deloitte/Ramboll Management.

3.1.2.3 3.1.2.3 Costs and explanatory variables

On the notification of exceptional situations in which driving times cannot be met, the impression is that the drivers do not regard the administration of notifications of exceptional situations as very burdensome. There is only a small difference between the use of analogue and digital tachographs since in both cases a notification must be written down. The main difference is that on the analogue tachograph, the card has to be taken out of the tachograph, and for the digital tachograph a printout is created first.

Table 19: Total Administrative Cost of EU IO in the Measurement Countries – “Notification of exceptional situations in which driving times cannot be met” – analogue tachograph

	“Notification of exceptional situations in which driving times cannot be met (exemption reasons)”, Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85 (Text with EEA relevance) – Declaration, Art. 4; Art. 12					
Segment: analogue tachograph	Measurement countries					
	BE	BG	PL	PT ⁴⁶	SK	SI
Internal time per driver per month (minutes)	4	3	1	-	1	4
Average hourly tariff (€)	21.00	2.00	5.00	-	4.00	7.00
Equipment Cost per driver per month (€)	0.00	0.00	0.00	-	0.00	0.00
Consulting Cost per driver per month (€)	0.00	0.00	0.00	-	0.00	0.00
Dominant employee type	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	elementary occupations	plant/machine operators, assemblers	plant/machine operators, assemblers
No. of vehicles	119,614	173,043	337,649	63,046	90,201	35,829
Frequency (times per year)	12	12	12	12	12	12
Total Admin. Cost per driver per month (€)	1.40	0.10	0.08	0.33	0.07	0.47
Total Admin. Burden per driver per month (€)	1.40	0.10	0.08	0.33	0.07	0.47
Total Cost (€)	2,009,515.20	207,651.60	337,649.00	248,534.57	72,160.80	200,642.40

This Table is based on data compiled by the Consortium.

⁴⁶ In Portugal no knowledge of the IO was given in the interviews. Therefore the cost represent an extrapolated value.

Table 20: Total administrative costs of EU IO in the Measurement Countries – “Notification of exceptional situations in which driving times cannot be met”– digital tachograph

“Notification of exceptional situations in which driving times cannot be met (exemption reasons)”, Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport and amending Council Regulations (EEC) No 3821/85 and (EC) No 2135/98 and repealing Council Regulation (EEC) No 3820/85 (Text with EEA relevance) - Declaration, Art. 4; Art. 12						
Segment: digital tachograph	Measurement countries					
	BE	BG	PL	PT ⁴⁷	SK	SI
Internal time per driver per month (minutes)	4	3	1	-	2	4
Average hourly tariff (€)	21.00	2.00	5.00	-	4.00	7.00
Equipment Cost per driver per month (€)	0.00	0.00	0.00	-	0.00	0.00
Consulting Cost per driver per month (€)	0.00	0.00	0.00	-	0.00	0.00
Dominant employee type	plant/machine operators, assemblers	plant/machine operators, assemblers	plant/machine operators, assemblers	elementary occupations	plant/machine operators, assemblers	plant/machine operators, assemblers
No. of vehicles	48.319	19.227	41.508	11.693	21.324	10.375
Frequency (times per year)	12	12	12	12	12	12
Total Admin. Cost per driver per month(€)	1.40	0.10	0.08	0.37	0.10	0.47
Total Admin. Burden per driver per month (€)	1.40	0.10	0.08	0.37	0.10	0.47
Total Cost (€)	811,759.20	23,072.40	41,508.00	52,285.52	25,588.80	58,100.00

This Table is based on data compiled by the Consortium.

The time spent for users of analogue and digital tachographs can be seen as equal. In Slovakia, the time spent using digital tachographs is slightly higher.

⁴⁷ In Portugal no knowledge of the IO was given in the interviews. Therefore the cost represent an extrapolated value.

- When calculating the average time used to comply with the Regulation, certain activities account for the most costs. These activities consist mainly of producing new data, the actual time recording being one quarter of total time, filling in the forms required takes about one third of the total time and handing over the information takes one tenth of the time. There are no differences between the segments;
- The costs for time recording decrease when using digital tachographs, dropping from one-third to one-tenth. On the other hand, getting the information from the device for further processing takes more time;
- In Slovenia, attention is given to quality assurance by training drivers and using more skilled employees to check the data submitted, which partially explains the comparatively higher administrative burden;
- During the interviews, it appeared that some businesses had never issued a notification of exceptional situations. In Portugal for example, no interviewees were aware of this IO. Therefore the costs represent an extrapolated value;
- Making the actual notifications is not regarded as burdensome.

As an example of how easily a violation can arise: “a truck driver stops at a parking lot to avoid exceeding the legal driving time. Since the parking place is crowded, his truck is not well parked and he is ordered by the police to park some way ahead. When there is a control two weeks’ later, he may be fined since the data extraction shows a violation of the rest period without recording the size of violation nor the circumstances”.

Source: Belgische TransportarbeidersBond/Union Belge des Ouvriers du Transport, extract from interview

3.1.2.4 3.1.2.4 First simplification suggestions

During the measurement and interviews, no simplification suggestions were made.

3.2 Directive 2004/49/EC Directive on safety on the Community’s railways

Directive 2004/49 aims to ensure the development and improvement of safety on the Community’s railways and improved access to the market for rail transport services. In the past, there were different national approaches to railway safety with different targets and methods applied.

The Directive focuses on four major aspects⁴⁸:

- Setting up, in each Member State, an authority responsible for supervising safety;
- Harmonising safety certificates delivered in the Member States;
- Establishing common safety indicators (CSIs) to assess whether the system complies with the common safety targets (CSTs) and to facilitate the monitoring of railway safety performance;
- Defining common rules for safety investigations.

Standardisation and harmonisation among the Member States will increasingly become more important with the rise of global competitiveness. Directive 2004/49 is an important step towards more harmonisation of railway safety requirements. An important example is the safety certificate, which provides evidence that a railway undertaking has established a safety management system. Directive 2004/49 establishes requirements for safety certificates. Recently the European Commission has harmonised the application for safety certificates for all railway infrastructures throughout the Community through Commission Regulation (EC) No 653/2007. The harmonised safety certificate application and guidelines contained within Regulation (EC) No 653/2007 provide guidance for railway undertakings and national safety authorities on what should be contained within an application for each part of the safety certificate.

Another important development on the road to harmonisation is the submission of a set of three proposals by DG TREN to overcome the existing barriers in the European railways and to stimulate the interoperability of railway vehicles between Member States. An example of such a barrier is the fact that in the current legislation, rolling stock authorised to operate in one Member State is not necessarily allowed to operate on the railway infrastructure of other Member States⁴⁹.

⁴⁸ Scadplus, <http://europa.eu/scadplus/leg/en/lvb/l24058.htm>.

⁴⁹Source: 2006/0273 (COD) Proposal for a Directive of the European Parliament and of the Council on the interoperability of the Community rail system (recast) – 21 September 2007. The proposals are: a recast of Directive 2004/49/EC aiming at streamlining national procedures for placing in service vehicles by applying more systematically the principle of mutual recognition; a new Directive

Most Member States have now transposed Directive 2004/49/EC into national legislation. However, they are still looking into establishing a way of meeting the requirements of this Directive.

Due to the fact that implementation of the legislation in the Member States is recent, the administrative burden measured reflects the time spent by businesses and competent authorities to prepare everything they need in order to work in line with the new requirements set out by the Directive. Railway undertakings and infrastructure managers have had their own way of working for decades with a significant focus on the domestic market. Interviewees mentioned that in general familiarisation and discussion costs much time. The number of railway undertakings is in most of the countries relatively low, with some exceptions like Germany (150 railway undertakings) and the UK (109 railway undertakings) and experience with these IOs was at the time of the measurement also low. Due to the specifics of the railway sector, the possibilities for learning from peers is low despite the efforts of umbrella organisations.

Irritation about the legislation from the railway undertakings and infrastructure managers was low, as businesses indicated that they understand the need for regulation in this area and that they, as businesses, also benefit from it.

This context as mentioned above partially explains the differences in administrative burden between the countries. A learning curve is expected over the coming years and costs are expected to go down as the processes become more routine. Due to the recent adoption and the short period of experience with the new regime, it is too early to define normally efficient businesses in the railway sector in relation to this Directive.

on the interoperability of the Community rail system aimed at a more progressive adoption of Technical Specifications of Interoperability (TSIs); a Regulation aimed at adapting the legislative framework for the European Railway Agency. See also Section 4 Outlook.

The target groups affected by Directive 2004/49 on safety on the Community's railways are: Railway undertakings and infrastructure managers.

The target group of infrastructure managers affected by the Railway Safety Directive is small. Two-thirds of the countries have no more than four infrastructure managers, most of them count only one or two. Railway undertakings and infrastructure managers can be state-owned or private, and both categories are in scope of the measurement.

The sections below present the measurement results for each of the IOs.

3.2.1 IO3 "Submission of a safety report", Directive 2004/49/EC Art. 9 par. 4

3.2.1.1 Characteristics of the IO

In general, businesses do not have much experience with the implication of IOs stemming from Directive 2004/49 as it was only fully transposed in April 2007 and the frequency of submission is low. Each year before 30 June, all infrastructure managers and railway undertakings must submit an annual safety report on the preceding calendar year to the national safety authority.

The safety report contains information on how the safety targets are met, the results of safety plans, the development of national safety indicators and Common Safety Indicators (CSIs) as well as the results of internal safety auditing. The safety report contains a listing and analysis of accidents and incidents that occurred in the previous year, including the number of incidents and accidents per type, persons injured or killed, indicators relating to consequences of accidents and indicators related to technical safety of infrastructure and management of safety.

Several countries mention high costs for implementing the Directive in their systems due to costs for familiarisation and adapting. Article 9 sub. 4 sets out the general headlines of the report and in Annex III (safety management systems), the intention and general guidelines for the description of the safety management system are given. Despite this guidance, the Directive leaves room for discussion, consequently increasing the time spent on familiarisation and implementation.

The focus on safety measures seems to the railway undertakings to be logical and reasonable.

3.2.1.2 Process for complying with IO

The business process, which is illustrated in the Figure below, is to prepare and submit a safety report to the safety authority. The activities for this are:

1. Identify national safety indicators;
2. Hold meetings with colleagues and experts to discuss the submission and the documents required (e.g. legal issues);
3. Create and complete a safety report. Collect relevant information on safety targets, safety performance, safety plans, results of internal safety auditing and any other details that might be relevant to the competent Member State authorities;
4. Copy documents;
5. Submit the safety report for the preceding calendar year to the competent authority.

Figure 8: Business process for "Submission of a safety report"



By Capgemini/Deloitte/Ramboll Management.

At the time of the measurement in the countries, different formats for the submission of the safety report were being used. The differences in formats and the different requirements for businesses as to how they submit the safety report have an impact on the level of administrative burden and partially explain the differences between the countries. The minimal requirements on reporting are being interpreted flexibly, ranging from small reports with minimal details to extensive reports with a very high level of detail.

Most businesses mention that the annual reports are largely based on statistical data, which are gathered during the year. However, in practice it is clear that many businesses are not gathering the statistical data in the format that is needed for the safety report, so they either need more time to recalculate the indicators or simply fill in only those parts of the document that they are able to complete on the basis of data available in the company. Almost all businesses will adjust their reporting systems to the reporting requirements of the authorities so as to be able to fill in the report without such problems in the years to come.

In Portugal and Poland, the authorities have been developing a standard format for this safety report. Until this new report format is made mandatory, the railway undertakings and infrastructure managers can deliver the safety report in the format they choose.

3.2.1.3 Costs and explanatory variables

The Directive affects the railway sector. For measuring the safety report, two segments were defined. These segments are:

- Infrastructure managers
- Railway undertakings.

Within the segments in the different countries, there are large differences in time spent for the submission of the safety report. These differences can in the most part be explained by the following factors:

1. Different requirements from the authorities for the safety report format;
2. Size and type (market share) of the businesses that are subject to Directive 2004/49;
3. Characteristics of the target group.

The factors above are explained further below:

- Not every country already has a standardised format for the submission of the safety report. Until this standardised format is established, businesses can submit a safety report in accordance with their own wishes. The Directive does, however, provide guidelines as to the content required;

- Member States may exclude from this Directive 2004/49 metros, trams and other light rail systems, networks that are functionally separate from the rest of the railway system and privately owned railway infrastructure that exists solely for the use by the infrastructure owner for its own freight operations. In some of the countries measured only the main public and freight railway undertakings are subject to Directive 2004/49, for example in Portugal and Bulgaria. In other Member States, such as Germany and the United Kingdom, smaller railway undertakings which only have privately-owned railway infrastructure, such as that used for freight transport in industrial areas for their own use, are also subject to Directive 2004/49.

A major part of the safety report consists of the listing of accidents and incidents using all the indicators. The time spent for large railway undertakings, with an 80% share of passenger transport, is therefore not proportional to that of a very small undertaking which has infrastructure for its own use.

In Member States where many smaller undertakings are subject to Directive 2004/49, a calculation is used to correct for the imbalance. The calculation method uses a weighted average, leaving the total administrative costs intact. On the basis of this calculation the average time spent per the safety report is in general low compared to Member States with a few railway undertakings. This is further explained in Annex 5.1.

- The target group consists of railway undertakings and infrastructure managers. In not all the businesses interviewed is drafting and submission of the report routine. For example, in Slovenia, gathering all the information and preparing it for submission was cited as being very time-consuming.

The measurement results must be seen as a snapshot in time at a given moment. As for all of Directive 2004/49, Member States and businesses are very busy implementing this legislation and preparing for it. In the near future, when all Member States use a more standardised format for the safety report and when businesses have their business processes arranged in a way that enables them easily to meet the criteria for information

delivery, it is expected that the time spent per company will go down and that there will be more harmonisation between the countries.

The measurement results for the Railway undertakings for the IO “Submission of a safety report” are in the Table below.

Table 21: Total administrative costs of EU IO in the Measurement Countries – “Submission of a safety report”⁵⁰–segment: Railway undertakings

IO “Submission of a safety report”						
Segment: railway undertakings	Measurement countries					
	BE	BG	PL	PT	SK	SI
Internal time per occurrence (minutes)	1,750	4,950	2,115	5,440	11,577	38,935
Average hourly tariff (€)	48.17	1.98	7.67	14.00	5.00	16.66
Equipment Cost per occurrence (€)	5.00	0.00	0.00	0.00	0.00	5.00
Consulting Cost per occurrence (€)	0.00	0.00	0.00	0.00	0.00	0.00
Dominant employee type	legislators, senior officials, managers	professionals	technicians, associate professionals	technicians, associate professionals	professionals	professionals
No. of Safety Report	3	3	78	2	29	1
Total Admin. Cost per occurrence (€)	1,409.83	163.50	270.25	1,269.33	964.75	10,817.75
Total Admin. Burden per occurrence (€)	1,409.83	163.50	270.25	1,269.33	964.75	10,817.75
Total Cost (€)	4,229.50	490.50	21,079.50	2,538.67	27,977.75	10,817.75

This Table is based on data compiled by the Consortium.

The measurement results for the Infrastructure manager for the IO “Submission of a safety report” are in the Table below.

⁵⁰The number of railway undertakings is based on ‘Energy and Transport in Figures’ 2007, presenting the 2005 data. For Poland, the figures are for 2004 (‘Energy and Transport in Figures, 2006) are used since a calculated weighted average is used.

Table 22: Total Administrative Cost of EU IO in the Measurement Countries – “Submission of a safety report”⁵¹ –segment: infrastructure managers

IO “Submission of a safety report”						
Segment: infrastructure managers	Measurement countries					
	BE	BG	PL	PT	SK52	SI
Internal time per occurrence (minutes)	9,600	27,720	4,935	18,040	-	17,520
Average hourly tariff (€)	34.94	2.00	7.93	14.00	-	17.40
Equipment Cost per occurrence (€)	2.00	0.00	0.00	0.00	-	0.00
Consulting Cost per occurrence (€)	0.00	0.00	0.00	0.00	-	0.00
Dominant employee type ⁵³	professionals	professionals	technicians, associate professionals	technicians, associate professionals	-	professionals
No. of Safety Reports	1	1	9	1	1	1
Total Admin. Cost per occurrence (€)	5,592.67	924.00	652.25	4,209.33	1,743.57	5,081.33
Total Admin. Burden per occurrence (€)	5,592.67	924.00	652.25	4,209.33	1,743.57	5,081.33
Total Cost	5,592.67	924.00	5,870.25	4,209.33	1,743.57	5,081.33

This Table is based on data compiled by the Consortium.

⁵¹The number of railway undertakings is based on ‘Energy and Transport in Figures’ 2007, presenting the 2005 data. According to this data, Germany has 220 railway undertakings. According to the German Safety authority this has become 150 in terms of the coverage of transposition.

⁵² In Slovakia there was limited cooperation from the infrastructure manager so no data was collected. Furthermore there is no experience with the IO under the current regime. Therefore the costs represent an extrapolated value.

⁵³ The dominant employee type is based on the standard typology from the ISCO standard, representing a wage level comparable to that of the employees involved. ‘Technicians, associate professionals’ is one type.

Differences due to national requirements

In relation to the segment 'Railway Undertakings', the structure of safety reports varies from company to company due to differences in business structure and size, as the content requirements are not specific and each operator works differently. For example, in Poland it was reported that one railway undertaking issued a report of 30 pages, whereas another issued a very detailed report of several hundred pages. The priority given to safety by the undertaking and descriptions which leave the requirements open to interpretation are reasons for differences between the level of detail in the reports.

An explanation for the lower total costs of the segment 'infrastructure managers' for Poland compared to the other countries is that the infrastructure managers have more experience with drafting and submitting the safety report, by sharing experiences between each other. Also part of the business process is performed by lower waged employee types than in other countries. Another explanation is that Poland has more infrastructure managers, and also some smaller companies, which spent relatively less time in preparing the safety report.

In Bulgaria, it takes a considerable amount of time to retrieve data from existing information (about 75% of the total time) and produce new data (about 25% of the total time). Retrieving information costs on average about five times more time than in the other Measurement Countries. The production of new data costs about twice as long in comparison with the other Measurement Countries. Inefficient business processes are the main driver of these differences.

In Slovenia, gathering all the information and preparing it for submission was mentioned as very time-consuming. Inefficient business processes are the main driver of these differences.

Differences due to business process

In Poland, the business process in railway undertakings requires that the person responsible contact all internal entities that are gathering relevant statistical information. Overall, the time needed to prepare the report depends to a great extent on the size of the

company, the quality of the information available and the time to process the gathered information into a report. In Poland, it is likely that at some points information is more readily available because it is constantly analysed within a company for managerial purposes or because a company is small and all internal entities are at the same location. An important reason for the average time spent in Poland being lower than in other countries, is that in Poland there are many very small railway undertakings falling under the scope of this Directive. These smaller railway undertakings will not spend so much time in preparing the report as the main railway undertakings.

In Portugal, a company's monthly safety reports are drafted and discussed during the monthly Board meetings. At the end of the year, the monthly reports are consolidated, adjusted and incorporated into the annual safety report.

In Slovakia, the submission of the safety report is not regarded as very burdensome for Slovakian railway undertakings as they create a detailed report after each accident investigation and use these reports for the purposes of the safety report. There is also an electronic system for accident evidence which is helpful in terms of statistical data. This increases the high-level of routine involved in the business processes and the frequency of internal reporting.

3.2.1.4 First simplification suggestions

During the interviews and workshops with business and experts, several initial simplification ideas were collected. A structured and detailed collection and analysis of possible reduction measures is being conducted during Module 5. Thus, this section only contains a summary of the suggestions gathered and does not represent a final list of simplification suggestions nor does it represent the point of view of the Consortium.

- Infrastructure managers may exchange ideas and solutions online to improve the dissemination of experience and best practice;
- Publish the requirements for the safety report earlier so that businesses can adjust their systems. If the safety indicators are used for the long term, this will lead to improvements in systems and business processes.

Streamline information processes

- Streamline the information provided by operators by creating a standardised form, methodological guidelines or an online form. Although this suggestion contradicts the principle of subsidiarity in the EU, experience in practice shows that some more guidance at operational level could be very valuable. It would reduce costs by helping businesses know which data to collect and how to adjust this data for the report;
- Make better use of the (digital) information that has already been collected on a day-to-day basis. When using the existing data available in the regular business systems, duplicated work can be avoided. The safety reports should be published digitally rather than on paper. A common database should be created of information that has already been submitted.

Suggestions for legislative improvement

- Define the requirements and formats of Directive 2004/49 and national legislation more clearly. Although this contradicts the principle of subsidiarity and the point of view of businesses in the policymaking process, there is a need for further guidance and/or knowledge sharing. This may come from the EU, or business or umbrella organisations. It will reduce the familiarisation time and help avoid over-compliance from putting more effort into the report than is needed. The 'Reasons Report' which explains the reason behind legislation to increase understanding of the legislation may be an element in this;
- Clearly describe how risks are to be described and measured since the Directive does not stipulate what approach should be used. The EC may play a role in further developing this as differences in risk assessments cause incompatibility between results in risk assessment and costs involved.

3.2.2 IO4 "Application for a safety certificate", Directive 2004/49/EC Art. 9; Art. 10 par.1; Art. 12 par. 1

3.2.2.1 Characteristics of the IO

In order to be granted access to the railway infrastructure, a railway undertaking must hold a safety certificate and to renew it once every five years. The purpose of the safety

certificate is to provide evidence that the railway undertaking has established its safety management system and can meet the requirements. The requirements are laid down in the Technical Specifications for Interoperability (TSIs) and in other relevant Community legislation and national safety rules in order to control risks and operate safely on the network⁵⁴. Annex III (safety management systems) sets out the intention and general guidelines for the description of the safety management system.

For railway undertakings operating international services it is important that the procedures for safety certification be similar in different Member States, therefore common parts of the safety certificate were recently harmonised under Regulation 653/2007 in order to provide for a common format for safety certificates and application documents⁵⁵. The harmonised safety certificate application and guidelines provide guidance for railway undertakings and national safety authorities on what should be included in the application for each part of the safety certificate. It gives undertakings the opportunity to adjust their systems to this reporting. The effect of the guidelines as described in Regulation 653/2007 are to a large extent not yet visible in the measurement results as most undertakings had not applied for a safety certificate following on the coming into force of the Regulation.

3.2.2.2 Process for complying with IO

In order to be granted access to the railway infrastructure, a railway undertaking must hold a safety certificate. The steps in the application process are:

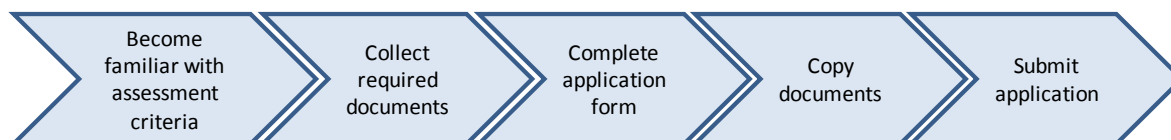
1. Become familiar with assessment criteria
2. Collect required documents to submit with application
3. Complete application form
4. Copy documents (licences, insurance, and financial cover) and attach them to the application form
5. Submit application to the competent authority.

⁵⁴ Scadplus, <http://europa.eu/scadplus/leg/en/lvb/l24058.htm>.

⁵⁵ Commission Regulation No (EC) 653/2007 came into force on 13 June 2007.

The business process is set out in the Figure below.

Figure 9: Business process for “Application for a safety certificate”



By Capgemini/Deloitte/Ramboll Management.

In the measurement phase, it appears that just a few railway undertakings had applied for a safety certificate under the current regime. In most of the Member States, the Directive was transposed in 2007. Most of the railway undertakings had applied for the safety certificate under previous regimes and still held valid safety certificates.

Within the initial Measurement Countries, only Bulgaria and Belgium have experience with the safety certificate (the railway undertakings had just recently applied for the certificate and were waiting for reaction from authorities). In order to get sufficient measurement data, additional measurements were carried out in Finland, France, Hungary and Sweden.

3.2.2.3 Costs and explanatory variables

The number of railway undertakings in the Measurement Countries that have applied for a safety certificate under the current regime is very low. The measurement results often represent the experience of just one company. Another complicating factor for the measurement of this IO is that these are the first times that railway undertakings have applied for the safety certificate under the current regime.

Bearing in mind the learning curve, it is expected that the next time applications for safety certificates are submitted, the costs will be lower due to increased familiarisation and the reuse of templates, forms and knowledge.

Measurement results for railway undertakings applying in their own Member State for the IO Application of a safety certificate are shown in the Table follow:

Table 23: Total Administrative Cost of EU IO in the Measurement Countries – “Application for safety certificate” – segment: railway undertaking applying for a safety certificate in their own Member State

IO “Application for a safety certificate”						
Segment: railway undertakings applying for operations in own MS	Measurement countries					
	BE	BG	FR	HU	SK	SE
Internal time per occurrence (minutes)	4,643	49,150	17,500	6,000	12,413	27,000
Average hourly tariff (€)	35.00	1.92	47.69	6.84	4.27	40.00
Equipment Cost per occurrence (€)	1.00	0.00	0.00	0.00	0.00	0.00
Consulting Cost per occurrence (€)	0.00	0.00	0.00	0.00	0.00	0.00
Dominant employee type	professionals	professionals	professionals	professionals	professionals	professionals
No. of railway undertakings	3	3	26	13	29	28
Frequency	0.2	0.2	0.2	0.2	0.2	0.2
Total Admin. Cost per occurrence (€)	2,709.42	1,575.83	13,908.33	684.00	884.42	18,000.00
Total Admin. Burden per occurrence (€)	2,709.42	1,575.83	13,908.33	684.00	884.42	18,000.00
Total Cost (€)	1,625.65	945.50	72,323.33	1,778.40	5,129.62	100,800.00

This Table is based on data compiled by the Consortium.

In general, the time reflects the fact that there is not much experience with the application. It took more time to deliver the data and documents required and to describe the Safety Management System for the first time, thus partially explaining the high costs.

For Slovakia, it is reported that the railway undertaking is a former state-owned undertaking that is facing inefficiencies due to its former structures which makes it difficult to separate costs among the organisational entities. It is, for example, difficult to draft a list of properties and it is also hard to define which costs are related to EU legislation. In Slovakia, since the transposition of the Directive has been completed very

recently, the time spent for this IO is therefore partly based on an estimation made by the main railway undertaking. The time estimated for the businesses involved may be higher due to a conservative estimate.

In Bulgaria, the railway undertaking had considerable difficulties in reporting on their assets and personnel as required by Annex IV of the Directive since their systems are not designed for this kind of information processing. For this business, it cannot be considered that its way of working constitutes that of a normally efficient business.

In France as well, the high costs reflect, according to the railway undertakings, the time needed to submit the application for the first time. It is expected by the undertakings that due to the experience from the forthcoming applications for the safety certificate, costs may drop to a quarter of the time spent on the first application process.

In Portugal, Directive 2004/49 had been transposed very recently and therefore the undertakings were currently working on establishing a safety management system. There was no experience with applications for the safety certificate under the current regime.

Results for railway undertakings applying in another Member State in relation to the IO “Application of a safety certificate” are in the Table below.

Table 24: Total Administrative Cost of EU IO in the Measurement Countries – “Application for safety certificate” – segment: railway undertaking applying for a safety certificate in another Member State

IO “Application for a safety certificate”						
Segment: railway undertakings applying for operations in another MS						
	BE	BG	FI	FR	HU	SE
Internal time per occurrence (minutes)	-	-	-	4,560	-	2,700
Average hourly tariff (€)	-	-	-	51.00	-	40.00
Equipment Cost per occurrence (€)	-	-	-	0.00	-	0.00
Consulting Cost per occurrence (€)	-	-	-	0.00	-	0.00
Dominant employee type	-	-	-	legislators, senior officials, managers	-	professionals

IO "Application for a safety certificate"						
Segment: railway undertakings applying for operations in another MS						
	BE	BG	FI	FR	HU	SE
No. of railway undertakings operating abroad	2	1	1	4	4	2
Frequency	0.2	0.2	0.2	0.2	0.2	0.2
Total Admin. Cost per occurrence (€)	2,526.93	222.07	2,025.00	3,876.00	669.72	1,800.00
Total Admin. Burden per occurrence (€)	2,526.93	222.07	2,025.00	3,876.00	669.72	1,800.00
Total Cost (€)	1,010.77	44.41	405.00	3,100.80	535.78	360.00

This Table is based on data compiled by the Consortium.

From the 10 (6 + the additional 4) countries where measurements were undertaken, only railway undertakings in France and Sweden had experience, as of the time when the measurements took place, in applying for a safety certificate in another Member State under the current regime. The total costs in the Table for the other Member States are based on extrapolation.

The time spent to prepare the application for the safety certificate in another Member State was much less than was initially the case when applying for the first time in their own Member State. This has to do with the fact that most of the information and formats could be reused. Now with the Regulation 653/2007, the expectation is that the administrative costs for applying in another Member State will decrease even more in the years ahead.

3.2.2.4 First simplification suggestions

During the interviews and workshops with business and experts, several initial simplification ideas were collected. A structured and detailed collection and analysis of possible reduction measures is being conducted during Module 5. Thus, this section only contains a summary of the suggestions gathered and does not represent a final list of simplification suggestions nor does it represent the point of view of the Consortium.

- Clarify the level of detail in the information to be provided. It was observed that the initial familiarisation with the Directive is a time-consuming activity. It should be

noted, however, that this recommendation is covered by the harmonised application forms in Regulation 653/2007;

- Reduce the documentation needed when applying for the safety certificate or safety authorisation by eliminating double submission of information already available at the same or another authority or sharing information between authorities/institutions;
- Improve the knowledge of railway undertakings about the modification procedure of the safety certificate. Every five years, the railway undertaking has to apply for a safety certificate. In this period, railway undertakings have often made internal changes that have a large impact on the organisation, and businesses state this is not reflected in the safety certificate. This suggestion was mentioned during interviews as a possible improvement although the Directive in Article 10 sub. 5 specifies the procedure for the update of a safety certificate in case of major changes.

3.2.3 IO5 “Application for a safety authorisation”, Directive 2004/49/EC Art. 11 par. 1

3.2.3.1 Characteristics of the IO

In order to be allowed to manage and operate rail infrastructure, the infrastructure manager must obtain a safety authorisation from the safety authority in the Member State where they are established. The authorisation should be reviewed every five years to allow for changes in the requirements in between.

To obtain an authorisation, the safety management system must be accepted. In addition, provisions made for the safety design, maintenance, operation of traffic control and the signalling systems must be accepted. The Member States will give detailed guidance on how to obtain the safety authorisation.

3.2.3.2 Process for complying with IO

The main steps in this process are:

1. Become familiar with safety authorisation requirements;
2. Collect relevant information and documents: confirmation of maintenance of a) a safety management system (SMS) b) provisions of the infrastructure manager to

meet specific requirements necessary for the safety design, maintenance and operation of the railway infrastructure;

3. Complete application form;
4. Copy documents and attach them to the application;
5. Submit application to the competent Member State authority.

The business process is presented in the Figure below.

Figure 10: Business process for “Application for a safety authorisation”



By Capgemini/Deloitte/Ramboll Management.

3.2.3.3 Costs and explanatory variables

In general, high costs are involved in providing the documents asked for in the Directive⁵⁶. The highest costs in the IO are for adapting documents and the description of the Safety Management System (SMS) in terms of the Directive’s requirements.

- As observed in the research in Bulgaria, one difficulty for the railway sector is that the railways were previously state-owned and have some inefficiencies in their business processes. Infrastructure managers in these countries have difficulty providing information since their systems are not designed to respond to such questions. This increases the additional costs for providing documentation;
- In Belgium, the infrastructure manager already had one kind of safety management system in place, but still needed to make many adjustments to the system to comply with the Directive. The description of the safety management system is part of the IO and took the infrastructure manager considerable time;
- In Belgium, the time taken to obtain authorisation is regarded as long. The Belgian infrastructure manager submitted the application for the safety authorisation in February 2007. The infrastructure manager received the authorisation in Spring

⁵⁶ See Annex I, Annex III

2008, although a maximum of four months is mentioned in Article 17 sub. 1, second paragraph;

- In Finland, the process is reported not to be burdensome due to the small size of the railway sector.

The following Table shows the measurement results for the IO “Application for safety authorisation”.

Table 25: Total Administrative Costs of EU IO in the Measurement Countries – “Application for safety authorisation”

	IO “Application for a safety authorisation”					
	Measurement countries					
Non segmented IO	BE	BG	FI	FR	HU	SE
Internal time per occurrence (minutes)	28,800	49,150	12,975	35,120	16,160	27,000
Average hourly tariff (€)	31.21	1.79	35.00	47.00	6.46	40.00
Equipment Cost per occurrence (€)	0.00	0.00	0.00	0.00	0.00	0.00
Consulting Cost per occurrence (€)	0.00	0.00	0.00	0.00	0.00	0.00
Dominant employee type	professionals	professionals	professionals	professionals	technicians, associate professionals	Professionals
No. of infrastructure managers	1	1	1	2	1	1
Frequency	0.3	0.2	0.2	0.2	0.2	0.2
Total Admin. Cost per occurrence (€)	14,980.00	1,469.17	7,568.75	27,510.67	1,738.67	18,000.00
Total Admin. Burden per occurrence (€)	14,980.00	1,469.17	7,568.75	27,510.67	1,738.67	18,000.00
Total Cost (€)	4,943.40	293.83	1,513.75	11,004.27	695.47	3,600.00

This Table is based on data compiled by the Consortium.

In general, the largest cost drivers are in retrieving information from the existing information systems, providing new data and copying documents. These activities count for two-thirds of all the costs involved. All Measurement Countries report high involvement of professionals in the process. More country specific remarks are:

- For Belgium and Bulgaria the time needed for familiarisation ranges from 10% for Belgium to 20% of the total costs for Bulgaria;
- In Bulgaria, training and providing information in order to get the correct data is a significant part of the total time involved;
- Finland reports low figures in comparison with other countries. The explanation provided is the fact that the railways have little infrastructure and it is not complex;
- In France, the infrastructure managers estimated that due to the learning curve and increased experience, the next application will take no more than about one third of the time required currently;
- In Hungary, the employee type 'technicians, associate professionals' is mentioned as the dominant employee type in the business process. Along with the lower internal time, this may be an indicator of a higher level of routine in the process.
- In Belgium the safety authorisation needs to be renewed every three years, in other countries once per five years. Both intervals comply to the statement in art. 11 sub 2: "The safety authorisation shall be renewed upon application by the infrastructure manager at intervals not exceeding five years".

3.2.3.4 First simplification suggestions

During the interviews and workshops with businesses and experts, several initial simplification ideas were collected. A structured and detailed collection and analysis of possible reduction measures is being conducted during Module 5. Thus, this section only contains a summary of the suggestions gathered and does not represent a final list of simplification suggestions nor does it represent the point of view of the Consortium.

- A suggestion made by several businesses was that the possibility should be created, wherever feasible, of shifting more responsibilities from the national authorities to the infrastructure manager and the railway undertaking, as it is they who must manage safety. This comment made by railway undertakings shows possibilities for cooperation. However, it may reduce the overall quality of the railway safety. Further research on this is recommended;

- Research on the actual time taken between submitting and granting authorisation. For Belgium, the time reported was up to one year before the authorisation was granted, although the Directive sets out a period of four months in Article 17 sub. 1 second paragraph. It may be valuable to carry out research on the timeframe to investigate reasons for possible delay.

3.2.4 IO6 “Submission of a rolling stock technical file”, Directive 2004/49/EC Art. 14 par. 2; Art. 14 par. 3; Art. 14 par. 4

3.2.4.1 Characteristics of the IO

Rolling stock is any type of equipment that can run on the rail track, including locomotives, carriages, freight wagons and maintenance vehicles. To place rolling stock in service in another Member State, the railway undertaking must submit to the relevant safety authority a technical file relating to the rolling stock or type of rolling stock. The technical file provides evidence that the rolling stock has received authorisation to be put into service in another Member State. It records its history of operation, maintenance and, where applicable, technical modifications undertaken since the authorisation.

On June 17 2008, Directive 2008/57 on the interoperability of the rail system within the Community was issued, which repealed Article 14 of Directive 2004/49. Most recommendations mentioned in section 3.2.4.4 reflect Article 14 of Directive 2004/49 and are addressed by Directive 2008/57. The recommendations made by the businesses may, therefore, reflect the old situation.

3.2.4.2 Process for complying with IO

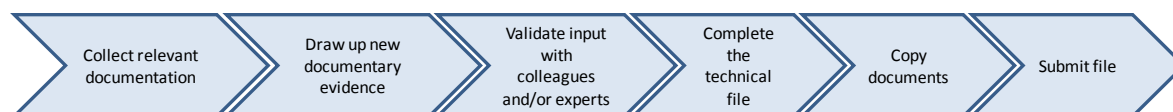
The business process is to draw up the technical file to ensure that rolling stock complies with the requirements and the conditions for use specified, so that they can be safely put into operation. Documentation from the railway undertaking on the different types of rolling stock used for operation, including evidence that they meet requirements of Technical Specifications for Interoperability (TSIs) or national rules, and have been duly certified.

To submit the rolling stock technical file the following activities are carried out:

1. Collect relevant documentation: authorisation of a rolling stock file, relevant technical data, maintenance programme and operational characteristics, evidence of technical and operational characteristics that show the rolling stock complies with signalling and control systems and other network constraints;
2. Draw up new documentary evidence such as history of operation and maintenance, and where applicable a description of technical modifications;
3. Validate input with colleagues and/or experts;
4. Complete the technical file;
5. Copy documents and attach them to the technical file;
6. Submit the technical file to the competent Member State authority.

The business process is shown in the Figure below.

Figure 11: Business process for "Submission of a rolling stock technical file"



By Capgemini/Deloitte/Ramboll Management.

3.2.4.3 Costs and explanatory variables

The number of rolling stock technical files that are submitted in a specific year differs per country. It would be possible for a railway undertaking not to submit any rolling stock technical files for a couple of years, but it is also quite plausible that in one year more than ten rolling stock technical files could be submitted. In general, in the countries measured, the number of rolling stock technical files submitted in another Member State was low.

The Table below present the measurement results for the IO "Submission of a rolling stock technical file".

Table 26: Total Administrative Cost of EU IO in the Measurement Countries – “Submission of a rolling stock technical file”

IO “Submission of a rolling stock technical file”						
Non segmented IO	Measurement countries					
	BE	HU	PL	SK	SI	SE
Internal time per occurrence (minutes)	1,029	130	2,700	1,220	1,250	60
Average hourly tariff (€)	39.59	6.77	9.50	5.00	19.00	40.00
Equipment Cost per occurrence (€)	5.00	0.00	0.00	0.00	0.00	0.00
Consulting Cost per occurrence (€)	0.00	0.00	276.89	282.00	10.00	0.00
Dominant employee type ⁵⁷	legislators, senior officials, managers	technicians, associate professionals	Professionals	professionals	professionals	professionals
No. of rolling stock technical files submitted	4	1	2	6	30	13
Total Admin. Cost per occurrence (€)	684.05	14.67	704.39	383.67	405.83	40.00
Total Admin. Burden per occurrence (€)	684.05	14.67	704.39	383.67	405.83	40.00
Total Cost (€)	2,736.20	14.67	1,408.79	2,302.00	12,175.00	520.00

This Table is based on data compiled by the Consortium.

The main costs are retrieving the information to be submitted and completing the forms. Remarks on country-specific implementation are:

- In Slovakia, the “Submission of a rolling stock technical file” was based on international agreements on mutual recognition of railway vehicles. The application under directive 2004/49 is filled out with data contained in the certificates for the common parts of railway safety. This information is re-used. However, businesses regard the time for processing of the submission as too long;

⁵⁷ The dominant employee type represents a standard typology from the ISCO standard, representing a wage level comparable to that of the employees involved. Examples of these categories are ‘Professionals’, ‘technicians, associate professionals’ and ‘legislators, senior officials, managers’.

- Often railway undertakings request the information needed for the rolling stock technical file from the manufacturer. After receiving the files, there is often still a need to process the information further before submission to the National Authority;
- In Poland high internal time is caused by time needed to become familiar with the process and documents needed for submission in another Member State;
- In Poland and Slovakia, consulting costs are mentioned. This may be caused by consulting for checking the work performed or the need for an expert opinion on the content of the technical file or the business process. Since the submission process occurs to a very limited extent, the number of experts strongly involved may be limited and not employed at the railway undertaking involved;
- In the case of Hungary and Sweden, countries where the additional measurements were carried out, the submission of the technical file was less time-consuming. Existing information was in a format which required almost no modification before submission.

3.2.4.4 First simplification suggestions⁵⁸

During the interviews and workshops with business and experts, several initial simplification ideas were collected. A structured and detailed collection and analysis of possible reduction measures is being conducted during Module 5. Thus, this section only contains a summary of the suggestions gathered and does not represent a final list of simplification suggestions nor does it represent the point of view of the Consortium.

Legislative alignment

- Make information on the procedure for submitting rolling stock technical files in another Member State more easily accessible and where possible, standardise it. Companies spend a lot of time familiarising themselves with the procedure and provisions which are in force in the Member State they are interested in;

⁵⁸ The recommendations reflect on Directive 2004/49 article 14 which has been repealed by Directive 2008/57 on June 17 2008. This is mentioned in section 3.2.4.1 (Characteristics of the IO).

- Clarify the exact procedure to be followed when putting the rolling stock into service in another Member State;
- Decrease the time between submitting and granting authorisation;
- Obligatory technical and safety tests of rolling stock are considered to be more burdensome than the submission of application and technical documentation itself. Provision of common rules for such tests would be helpful as tests carried out in a particular country could be potentially considered as adequate in the event of an application in another Member State.

Reduction proposals following the implementation of e-Government solutions

- Introduce an e-database of permits issued by Member State that can be viewed by national authorities in another Member State. In this case, an official copy would no longer be required since it would be centrally stored. Certificates and results of technical tests may also be submitted, thus reducing costs for these documents.

Information processes

- Standardise the technical file at the producer's end so that railway undertakings are relieved of collecting, translating and drawing up the technical file. This recommendation was mentioned during an interview with railway undertakings and would come under the responsibility of railway undertakings and manufacturers.

3.2.5 IO7 "Reporting of serious accidents and incidents to investigation body", Directive 2004/49/EC Art. 21 par. 3

3.2.5.1 Characteristics of the IO

Directive 2004/49 describes what constitutes a serious accident. A serious accident is defined as: any train collision or derailment of trains resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any similar accident with an obvious impact on

railway safety regulation or the management of safety⁵⁹. When a serious accident or incident has happened, the railway undertakings, infrastructure managers and, where appropriate, the safety authority, report immediately to the investigating body. The investigating body has to respond to such reports and make the necessary arrangements to start the investigation after receipt of the report concerning the accident or incident.

The EU Requirement is related to reporting of railway undertakings and infrastructure managers to the national investigation body in the event of serious accidents. The criteria are clearly defined in Directive 2004/49. Serious accidents as defined in Directive 2004/49 occur very rarely. National authorities also inform the European Railway Agency (ERA) about serious accidents, which are then registered in the ERA database, although more reports than strictly needed are stored compared to the criteria mentioned in the Directive.

3.2.5.2 Process for complying with IO

The accidents and incidents must be reported to the investigating body immediately after the serious accident has taken place.

The steps to take are:

1. Receive the notification of a serious accident;
2. Report this immediately to the investigation body.

⁵⁹ Directive 2004/49 Article 3 sub I: 'serious accident' means any train collision or derailment of trains, resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any other similar accident with an obvious impact on railway safety regulation or the management of safety; 'extensive damage' means damage that can immediately be assessed by the investigating body to cost at least EUR 2 million in total.

Figure 12: Business process for IO “Reporting of serious accidents and incidents to investigation body”



By Capgemini/Deloitte/Ramboll Management.

3.2.5.3 Costs and explanatory variables

In many countries, this IO is implemented in such a way that every single incident is reported. The administrative cost related to the reporting of accidents other than serious accidents to the investigation body is regarded as the administrative cost of a Possibility Not stated in the EU legal Act. This kind of reporting is not required in EU legislation. For example in Slovakia, the actual reporting procedure for an accident is the same, irrespective of the size of an accident. Most of the administrative costs related to Possibilities Not stated in the EU legal Act for Transport are related to these national requirements.

The following Table shows the measurement results for the IO “Reporting of serious accidents and incidents to the investigation body” per Measurement Country.

Table 27: Total Administrative Costs of EU IO in the Measurement Countries – “Reporting of serious accidents and incidents to investigation body”

IO “Reporting of accidents and incidents to investigation body”						
Non segmented IO	Art. 21 par. 3					
	BE	BG	PL	PT	SK	SI
Internal time per occurrence (minutes)	200	50	20	20	52	80
Average hourly tariff (€)	29.00	1.90	8.75	16.75	5.00	19.00
Equipment Cost per occurrence (€)	0.00	0	0.00	0.00	0	0.00
Consulting Cost per occurrence (€)	0.00	0	0.00	0.00	0	0.00
Dominant employee type	Professionals	professionals	professionals	professionals	professionals	professionals
No. of serious accidents	2	1	1	1	1	1
Total Admin. Cost per occurrence (€)	96.67	1.58	2.92	5.58	4.33	25.33

IO "Reporting of accidents and incidents to investigation body"						
Non segmented IO	Art. 21 par. 3					
	BE	BG	PL	PT	SK	SI
Total Admin. Burden per occurrence (€)	72.50	1.19	2.19	4.19	3.25	19.00
Total Cost (€)	193.33	1.58	2.92	5.58	4.33	25.33

This Table is based on data compiled by the Consortium.

In general, the major part of the costs for reporting of serious accidents and incidents arises from the activities of retrieving information, drawing up a report and completing forms.

- Within the business processes of railway undertakings and infrastructure managers, safety has a high priority. Since the time for reporting of serious accidents and incidents to the investigation body is very low compared to the time for the business-as-usual safety process, solely the reporting part of the process is measured. As mentioned during interviews, the line where Business-as-Usual stops and legislative obligation begins is not very clear most of the time due to this intertwining. Therefore, a level of Business-as-Usual costs of 25% is included in the costs;
- The number of serious accidents and incidents which have had to be reported to the investigation body is low – within the Measurement Countries no more than one or two a year⁶⁰;
- In Slovakia an accident occurred on 14 June 2006, however this was before the URZD (Railway Regulatory Authority) was responsible.

3.2.5.4 First simplification suggestions

During the interviews and workshops with business and experts, several initial simplification ideas were collected. A structured and detailed collection and analysis of possible reduction measures is being conducted during Module 5. Thus, this section only contains a summary of the suggestions gathered and does not represent a final list of simplification suggestions nor does it represent the point of view of the Consortium.

⁶⁰ Yearly average for 2006–2008; 2007 for EU-12 Member States.

- Immediate reporting of accidents is a responsibility of the railway undertaking, the infrastructure manager and the safety authority. This divided responsibility can cause twice the cost by duplicating activities. However, it is the responsibility of the Member State to implement a proper structure of reporting. It was noted that the parties involved found this part difficult to interpret. The EC could research its role on this point.

3.2.6 IO8 “Cooperation with serious accident investigations”, Directive 2004/49/EC Art. 19; Art. 20

3.2.6.1 Characteristics of the IO

Directive 2004/49 describes in Article 3 sub. I what constitutes a serious accident: any train collision or derailment of trains resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any similar accident with an obvious impact on railway safety regulation or the management of safety⁶¹.

In the event of a serious accident, the Member State launches an investigation carried out by an independent investigating body. The investigators must be given access to any relevant information or records held by the infrastructure manager or railway undertaking.

3.2.6.2 Process for complying with IO

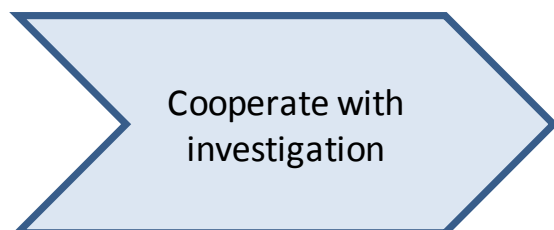
Infrastructure managers and railway undertakings have to ensure that all necessary information is available and answer questions during the investigation.

The activity for this IO is:

1. Cooperate with the investigation body.

⁶¹ Directive 2004/49 Article 3 sub. I: ‘serious accident’ means any train collision or derailment of trains, resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any other similar accident with an obvious impact on railway safety regulation or the management of safety; ‘extensive damage’ means damage that can immediately be assessed by the investigating body to cost at least EUR 2 million in total.

Figure 13: Business process “Cooperation with serious accident investigation”



By Capgemini/Deloitte/Ramboll Management.

3.2.6.3 Costs and explanatory variables

The following Table shows the measurement results for the IO “Cooperation with serious accident investigations” per Measurement Country.

Table 28: Total Administrative Cost of EU IO in the Measurement Countries – “Cooperation with serious accident investigations”

IO “Cooperation with serious accident investigations”						
Non segmented IO	BE	BG	PL	PT	SK ⁶²	SI
Internal time per occurrence (minutes)	960	8,550	2,103	240	-	360
Average hourly tariff (€)	35.00	2.00	10.00	19.00	-	19.00
Equipment Cost per occurrence (€)	0.00	0.00	0.00	0.00	-	0.00
Consulting Cost per occurrence (€)	0.00	0.00	0.00	0.00	-	0.00
Dominant employee type	professionals	professionals	professionals	professionals	professionals	
No. of occurrences ⁶³	2	1	1	1	1	1
Total Admin. Cost per occurrence (€)	560.00	285.00	350.50	76.00	180.82	114.00
Total Admin. Burden per occurrence (€)	560.00	285.00	350.50	76.00	180.82	114.00
Total Cost (€)	1,120.00	285.00	350.50	76.00	180.82	114.00

This Table is based on data compiled by the Consortium.

⁶² Extrapolated figure.

⁶³ Since serious accidents do not occur frequently, an annual average of accidents has been taken based on the data available. Based on the ERA database for 2006–2008, this period is for: Bulgaria, Slovakia, Slovenia – 2008; Portugal – 2006–2008; Belgium and Poland – 2007–2008.

The main cost drivers are the retrieving of relevant data from existing data, adding new information and holding meetings with experts involved. Professionals are the dominant employee type involved.

- The total costs for Slovakia represent an extrapolated figure. The investigation body was set up very recently and at the time of the measurement railway undertakings/infrastructure managers had no experience in fulfilling the IO in the way set out in the Directive. In the past, the serious accident investigation was mainly carried by the infrastructure manager in cooperation with the railway undertaking;
- The main cost driver for Bulgaria is holding meetings, which represents about four-fifths of the total costs. However, there had not been any serious accidents in the time frame. This internal time may also decrease over time when there is more experience with the system. As mentioned during interviews, the changes in business processes and changes in the safety organisation increase the need for good understanding and close collaboration of the parties involved;
- Differences in internal time may be influenced by the characteristics of an occurrence. This has not been subject to further investigation, but it could partially explain differences in time.

3.2.6.4 First simplification suggestions

No simplification suggestions were noted during the measurement.

4. Conclusion and Outlook

In total the Administrative Cost resulting from the legislation in scope of the Transport Priority Area amounts to €3,104bn. Of the total cost for the Priority Area, 97.5% (€3,027bn) has been classified as Administrative Burdens, while €30,300 stems from National Obligations going beyond EU Requirements. That is 0.1% of the cost associated with Directive 2004/49.

A 25% reduction of the Administrative Burden for the Transport Priority Area would amount to €776mn.

The costs are concentrated in the Regulation 561/2006 on certain social legislation related to road transport. Within this piece of legislation, the costs are highly concentrated on the IO “Recording time spent driving a vehicle and recording working time”. For this IO, analogue or digital tachographs are used by every driver driving a vehicle for commercial transport. The IO “Notification of exceptional situations in which driving times cannot be met (exemption reasons)” is linked to this IO. These notifications are made by writing the exemption reasons on the analogue disc or print-out when using a digital tachograph.

The analogue tachograph will be replaced by a digital version. It is expected that in 2012 most of the transport businesses will use digital tachographs. These digital tachographs are mandatorily installed in all new vehicles. New technologies and increased experience by back offices will decrease costs.

Directive 2004/49 had been implemented only recently. There is not much experience with this piece of legislation. The main reason for high costs for the “submission of a safety report” is that the population, i.e. the number of times a report has to be handed in, is higher compared to the frequency for other Railway IOs. It was also observed that familiarisation and adjusting the report to a defined format takes a lot of time.

The focus of this study is the administrative cost imposed on businesses due to IOs within the Transport Priority Area. Hence the study does not look at the benefits of legislation or

the direct financial or substantive costs. As objectives and benefits have a significant impact on any potential decision as to whether to amend, replace, or reconsider certain regulatory frameworks or IOs as suggested in this report, these should be clearly analysed and considered before any such decision is made.

Changes of the kind put forward here are part of a highly dynamic environment and cannot be considered separately from this context. How a suggested change will impact the business and its stakeholders are important elements to include in further studies of the simplification suggestions. A structured approach to analysing simplification suggestions is being conducted in Module 5.

The first part of Module 5 was started in parallel to the measurement work presented in this report and focuses on conducting national events in all Member States as well as a large SCM event at EU level, the Cutting Red Tape for Europe Conference⁶⁴. The events were conducted to:

- Disseminate the early results of this project
- Involve and activate national and EU stakeholders further, and
- Collect input into the analysis of the simplification suggestions.

To maintain and develop further the positive results of these activities, an e-magazine on important SCM news is produced quarterly and DG Enterprise's Administrative Burdens Reduction website was restructured and editorial input provided.

The Module 5 work is building further on the results from Modules 3 and 4 to deliver reduction recommendations for the priority areas in this project based on a specially developed reduction methodology. This methodology is currently being used to identify and distinguish changes to EU Legislation (IOs stemming from EU legislation), changes to implementing/transposition measures adopted by the Member States (better practice, including possible elimination of additional requirements). Furthermore, a monetary evaluation of the reduction recommendations will be conducted along with an analysis on

⁶⁴ Held in Brussels on June 20th 2008; see www.cuttingredtape.eu.

their implementability. In addition to the input stemming from this project, additional input from best-practice countries, EU level experts within and across priority areas, and existing reduction recommendations and strategies are being used. The results of this work are expected by the end of March 2009.

4.1 (Future) EC Activities that have Impact on Administrative Burdens

Regulation 561/2006 on social legislation

DG Transport and Energy has launched several initiatives that deal with possible burdens that have come with the introduction of the digital tachograph. An example of such an initiative is the SMART project.

SMART Digital Tachograph

The SMART project, co-financed by the European Commission, gathers major stakeholders in the road transport field in order to amend and improve Annex 1B of Regulation (EEC) 3821/85, which regulates the digital tachograph system in Europe. Since June 2007, the project has been assessing potential improvements to the current tachograph legislation and proposing solutions to stabilise the first generation of digital tachograph/tachograph cards. At the same time, the broad acceptance of such solutions is regularly checked with Member States, industry and the European Commission.

Proposals related to Directive 2004/49 on railway safety

The EC has harmonised the application for a safety certificate for all railway infrastructures throughout the Community through Regulation 653/2007. It is expected that this harmonisation will reduce Administrative Burdens (AB). Regulation 653/2007 contains some implementing measures regarding Directive 2004/49 that sets provisions for the safety certificate procedure. These are:

- A recast of Directive 2004/49 aiming at streamlining national procedures for placing in service rolling stock by applying more systematically the principle of mutual recognition;
- A new Directive on the interoperability of the Community rail system aimed at a more progressive adoption of Technical Specifications of Interoperability (TSIs);

- A Regulation aimed at adapting the legislative framework for the European Railway Agency.

5. Annex

5.1 Methodological challenges in the Transport Priority Area

5.1.1 Regulation 561/2006 on the harmonisation of certain Social Legislation

For the IO “Recording time spent driving a vehicle and recording working time” some challenges are mentioned below in relation to the measurement unit, identifying the correct total number of drivers (Q) per country and providing a realistic share of the segments analogue and digital tachographs:

Measurement unit versus population

The administrative costs are measured as time spent recording driving a vehicle and recording working time, per driver per month. To calculate the costs per year, a frequency of 12 is used. The population number is the number of drivers per country driving a vehicle with an analogue or digital tachograph. Most statistics were based on number of vehicles rather than number of drivers in a country. Therefore, as a starting point for the number of drivers, the number of vehicles the Regulation applies to was taken. Although the number of drivers is estimated to be slightly higher than the number of vehicles, there is a one-on-one connection assumed between driver and vehicle to account for circumstances such as multiple drivers of one vehicle, holidays, illness and vehicles that are not used. This approach has been validated by DG TREN, quality checks and experts.

Population

Based on the assumption that the number of drivers is equal for statistical purposes to the number of vehicles, the total population of vehicles is needed, and this has to be based on figures from multiple sources⁶⁵. In some cases, calculations or assumptions are made which are stated in the Table below. For several countries, adjustments to the population

⁶⁵ *Energy and Transport in Figures*, op. cit., 2006 and 2007; *EU Fleet by Vehicle Type*, 2006, ANFAC; *New Motor Vehicle Registrations in the EU in 2007 by country*, ANFAC, ACEA; *European motor vehicle parc 2006*, 2008, ANFAC.

have been made since they have a very high number of vehicles older than 1997 (Vehicle Park 2006). For the Czech Republic, Italy, Latvia, Poland, Portugal and Spain, only 50% of vehicles older than 1997 have been taken into account since it is assumed that they are no longer in service for commercial transport under the Regulation.

Table 29: Total number of vehicles to which the Regulation applies

Countries	No. of vehicles	Comments
AT	84,266	
BE	167,933	
BG	192,271	Calculated by the population model (input 23 countries)
CY	8,178	Calculated by the population model (input 23 countries)
CZ	201,665	Numbers of vehicles sold 2007(ACEA). 50% older vehicles (<1997) correction applied
DE	1,116,854	
DK	59,736	
EE	30,892	
EL	182,076	
ES	510,708	50% older vehicles (<1997) correction applied
FI	102,072	
FR	652,000	
HU	108,287	Calculated by the population model (input 23 countries)
IE	45,804	
IT	859,691	50% older vehicles (<1997) correction applied
LT	71,210	
LU	18,331	Only the vehicles sold from 2001 on are used
LV	50,677	Numbers of vehicles sold from 2001 (ACEA). 50% older vehicles(<1997) correction applied
MT	4,674	Calculated by the population model (input 23 countries)
NL	182,000	
PL	379,157	50% older vehicles (<1997) correction applied
PT	74,739	50% older vehicles (<1997) correction applied
RO	113,813	
SE	76,724	
SI	46,204	
SK	111,525	
UK	662,760	Source: UK Department for Transport

This Table is based on data compiled by the Consortium.

Analogue and digital tachographs

The level of digital tachographs in 2008 is calculated by assuming that the vehicles sold in 2006 and 2007 all have digital tachographs installed. From 2006 on, all new vehicles must have digital tachographs installed. These figures have been validated by businesses and experts.

Table 30: Analogue and digital tachographs per country in absolute numbers and percentages

Countries	Total analogue tachographs	Total digital tachographs	Analogue (%)	Digital (%)	
AT	47,343	36,923	56%	44%	
BE	119,614	48,319	71%	29%	
BG	173,043	19,227	90%	10%	Estimate, due to recent accession to EU. Validated by DG TREN and experts
CY	5,970	2,208	73%	27%	Based on average % for all countries
CZ	162,203	39,462	80%	20%	
DK	29,415	30,321	49%	51%	
EE	22,758	8,134	74%	26%	
FI	85,303	16,769	84%	16%	
FR	405,165	246,835	62%	38%	
DE	728,064	388,790	65%	35%	
EL	182,076	0	100%	0%	Greece has a 0% digital tachographs due to transposition issues ⁶⁶
HU	79,050	29,237	73%	27%	Based on average % of all countries
IE	21,450	24,353	47%	53%	
IT	750,328	109,363	87%	13%	
LV	42,200	8,477	83%	17%	
LT	53,242	17,968	75%	25%	
LU	11,094	7,237	61%	39%	

⁶⁶ The transition issue is the lack of a working system for issuing drivercards. Without this it is not possible for Greek drivers to work with a digital tachograph. As is stated in the communique IP/07/1538, "Digital tachograph for road transport: Commission takes Greece to the Court of Justice", Brussels, 17th October 2007: "(...) Greece has failed to take all the required measures." (...) "As a result, drivers who have their residence in Greece cannot obtain secure drivercards and digital tachographs cannot be used by transport undertakings established in Greece."

Greece has officially started issuing digital tachograph cards as from the 3rd of November 2008. The Greek CIA Information System is therefore operational and ready to process the collected applications. (www.eu-digitaltachograph.org/ Greece has started issuing tachograph cards)

MT	3,412	1,262	73%	27%	Based on average % of all countries
NL	109,100	72,900	60%	40%	
PL	337,649	41,508	89%	11%	
PT	63,046	11,693	84%	16%	
RO	102,431	11,381	90%	10%	Estimate, due to recent accession to EU. Validated by DG TREN and experts
SK	90,201	21,324	81%	19%	
SI	35,829	10,375	78%	22%	
ES	372,817	137,891	73%	27%	
SE	49,600	27,124	65%	35%	
UK	447,330	215,430	67%	33%	
Average			74%	26%	

This Table is based on data compiled by the Consortium.

Equipment costs

Significant time was spent during the interviews on understanding the costs of tachograph units and the amount of additional costs stemming from software, variable costs and maintenance. Since there are a limited numbers of tachograph manufacturers and a limited number of vehicle manufacturers, the costs for tachograph units are regarded as highly comparable. Therefore, the standard costs per vehicle for equipment have been calculated. The assumptions used in the calculation are:

- The average price for an analogue tachograph is based on prices of 24 devices across 2 models; for the digital tachograph the average price is based on prices of 53 devices across 8 models. The read-out device is based on prices of 8 devices across 3 models;
- It is assumed that on average one reader is used per 25 vehicles;
- The variable costs are based on:
 - Analogue tachograph: tachograph cards, three boxes with 100 cards a year; box costs about €7;
 - Digital tachograph, paper rolls, three paper rolls a year, about €7 per roll.

Table 31: Tachograph costs for analogue and digital tachographs (estimate)

Type or device	Average Cost for device	Variable Cost	Read-out device (average)	Total Cost per vehicle per month
Analogue tachograph	€360	€21	€0	€4.80
Digital tachograph	€646	€21	€340	€7.20

This Table is based on data compiled by the Consortium.

5.1.2 Directive 2004/49/EC on safety on the Community's railways

This chapter describes the sources used for population and specifically for the number of serious accidents and incidents. Other challenges that are described are the effect of the size and structure of railway undertakings in some Member States.

Serious accidents and incidents

The number of serious accidents and incidents are based on the ERA database. All dossiers uploaded in the ERA database are checked in terms of content to check their compliance with the definition of Article 3. The figures have been cross-checked with the Agency's Public Database of Safety Documents.

Sources used for population

This section presents sources of information used along with the population figures as stated in the Table below. Where the abbreviation N/T is used, this indicates 'No Transposition', either because the Member State has no railways, i.e. Cyprus and Malta, or because the Directive has not been transposed⁶⁷.

Table 32: Railway Sector populations per country

Countries	Infrastructure managers	# Railway undertakings	#rolling stock technical files	# Serious accidents
(segment)				
AT	3	24	9	3
BE	1	3	4	2
BG	1	3	0	1
CY	N/T	N/T	N/T	N/T
CZ	1	46	15	4
DK	2	N/T	1	4
EE	1	10	0	2
FI	1	4	0	1
FR	2	26	1	3
DE	2	150	1	3

⁶⁷ For more details see Section 2 of the Module 2 report.

Countries (segment)	Infrastructure managers	# Railway undertakings	#rolling stock technical files	# Serious accidents
EL	N/T	N/T	1	2
HU	2	13	1	3
IE	1	1	0	1
IT	N/T	N/T	1	N/T
LV	1	14	0	1
LT	1	1	0	1
LU	N/T	N/T	N/T	1
MT	N/T	N/T	N/T	N/T
NL	1	15	7	2
PL	9	78	2	1
PT	1	2	0	1
RO	1	90	2	1
SK	1	29	6	1
SI	2	1	30	1
ES	1	8	1	3
SE	1	28	13	2
UK	18	109	14	5
			Railway undertakings that want to place rolling stock in service in another MS	

By Capgemini/Deloitte/Ramboll Management.

The sources used are:

- Number of infrastructure managers based on
 - www.eimrail.org/
 - www.railneteuropa.com;
- Number of serious incidents, for 2006. For new Member States number of serious accidents for 2007 (01/07/2007), <http://pdb.era.europa.eu>. The reference period is five years.
- Number of railway undertakings operating outside their home country, based on an unpublished EU report;
- Number of railway undertakings based on the DG TREN report “*Energy and Transport in Figures*” 2006 and 2007 (reporting figures from 2004 and 2005);
- Germany shows 220 railway undertakings in *Energy and Transport in Figures 2007*. According to the German Safety Authority, this has changed to 150 railway undertakings due to the manner of transposition.

Using weighted averages for correction of imbalance in a railway sector

In Measurement Countries such as Poland and Slovakia, the railway sector consists of two major railway undertakings and a large number of small railway undertakings. Since the segmentation in the measurement is not based on size of the company and the time spent for a large railway undertaking is far more than for a small railway undertaking the

standardised results are based on a weighted average. The calculation is based on: (large undertaking x time for large undertaking) + (small undertakings X time for small undertaking)/total number of undertakings.

National IOs linked to EU IO (technical issue)

A remark needs to be made about the administration of IOs in the 'BOA'⁶⁸-supporting system regarding the reporting of accidents and incidents.

- Railway undertakings and infrastructure managers in many countries are also obliged to report all other accidents and incidents immediately and not only serious accidents as defined in the Directive as required by the European legislation. European legislation only requires railway undertakings and infrastructure managers to report on all accidents and incidents on a yearly basis in a safety report. It was agreed with DG TREN that if a Member State requires the infrastructure manager and/or railway undertaking also to report all accidents and incidents immediately, then it must be considered as a Possibility Not stated in the EU legal Act for the IO about the safety report. When entering Possibilities Not stated in the EU legal Act in the 'BOA' supporting system this was taken into account. However, of these nine Possibilities Not stated in the EU legal Act on immediate reporting of all accidents, not every Possibility Not stated in the EU legal Act could be linked to the safety report. In some cases, the Possibility Not stated in the EU legal Act is linked to the IO "Immediate reporting of serious accidents and incidents". The reason for this is that the methodology only makes it possible to link a Possibility Not stated in the EU legal Act to a parent IO that stems from the same legislative act. In some countries, the immediate reporting of accidents and incidents is described in legislative act other than the one requiring the yearly safety report. It was therefore impossible to link the Possibility Not stated in the EU legal Act to the safety report.

⁶⁸ BOA stands for Base de Données Obligations Administratives and is the administrative tool for recording administrative burdens

5.2 Collection and extrapolation of population data

A detailed description of the process of population data collection and extrapolation can be found in the main report on the measurement data and analysis as specified in the specific contracts 5&6 on Modules 3&4 under the Framework Contract n° ENTR/06/61 covering all Priority Areas.⁶⁹ This annex covers only the specific Priority Area and describes the efforts that were carried out to obtain population data and the quality assurance.

For the Transport Priority Area, the Consortium collected ~57% of the of data points for all information obligations. For the eight information obligations in this Priority Area (of which four are segmented), ~9 data points were collected on average per Member State⁷⁰ (but excluded from that are the so-called Baseline Countries). In turn, ~43% of the data points were extrapolated. Additional and supplemental information on specific issues were obtained via desk research on branch reports⁷¹ and database queries via the Eurostat homepage as well as interviews with the respective authorities.

Within the Priority Area there were few problems arising from the data collection as the Information Obligations were clearly defined. Data that derived from the average was counterchecked again by carrying out extensive desk research at national transport and railway authorities and the European Railway Agency.

For the Transport Priority Area, two environment variables were set up to extrapolate data points where data was missing. These environment variables covered the number of railway undertakings and the amount of national transport of goods in million tonne-kilometres. This data was gained through desk research with Eurostat data. These

⁶⁹ The extrapolation model as well as the process of population data collection and extrapolation is further described in the annex of the main report on the measurement data and analysis as specified in the specific contracts 5&6 on Modules 3&4 under the Framework Contract n° ENTR/06/61.

⁷⁰ The sources for individual data points can be found in the database.

⁷¹ For example, see Panorama of Transport,

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-DA-07-001/EN/KS-DA-07-001-EN.PDF.

environment variables were tested against gross national product, nominal economic growth, number of businesses in the transport branch and other specific information like intra EU-trade.

The quality assurance for this Priority Area was integrated in the process of data collection and extrapolation. After extrapolation, the plausibility of the figures was again checked by expert assessment and by comparing the extrapolation results to the output of the desk research and to the results of the Baseline Countries.