

Final Report

Driving Restrictions for Heavy Goods Vehicles in the European Union

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Final Report

Driving Restrictions for Heavy Goods Vehicles in the European Union



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Executive Summary

Main Results

Driving restrictions hinder international road freight transport and make the planning procedures of transport operators more complex. However, the actual number of restrictions in effect in a certain region and when communicated well before the actual date that the restrictions are in force, the cost price effects of these restrictions is limited to a maximum of 5 percent. Especially in cases when the communication (of the adaptation) of a driving restriction has been suboptimal strong negative effects can be expected for the transport sector. The planning procedures of transport operators could be severely disrupted with suboptimal planning schemes as a result. Even the logistical processes on the premises of the receiving shipper could be frustrated in cases where a driver (and his company) was surprised by a certain adaptation and the driver had to stop for a longer period. Examples were investigated and amongst other things show that the adaptation was sometimes communicated solely in the native language.

Introduction

The motivation behind establishment of a driving restriction in a certain region is quite divers. It ranges from environmental issues, such as noise and pollution reduction, to improvement of road safety during public holidays. The implementation of most of the driving restrictions was well motivated by the legislative institutions. However, in principle all driving restrictions for international road freight transport hinder the free flow of goods in the European Union. From this viewpoint the actual number of restrictions shall be kept to a minimum. For this reason the European Commission assigned NEA to provide insight into the impact of driving restrictions on the functioning of the internal market.

Fixed and non-fixed Calendar Date Restrictions

Driving restrictions can be clustered into two main types. The first type consists of restrictions with a (series of) fixed calendar dates on which this restriction is in effect. Information on this type of restriction is commonly communicated well before the actual date and therefore has limited effect on the transport operations. Typical examples hereof are (general) night bans and weekend driving bans, holiday period or public holiday related driving restrictions. The non-fixed calendar date restrictions tend to cause more problems to the international transport sector. Although the specifics of these restrictions are well communicated, the calendar date normally is only known little ahead of the actual date. These restrictions relate to, for instance, the current weather situation or the traffic density on a certain day. As this type of restriction thus can be effectuated "suddenly", the disruptive effects on transport operations can be large.

Social Impacts

The social impacts for international drivers are fairly limited as long as the information on the specifics of a certain driving restriction is communicated well before the actual date. However, examples have been investigated in which the actual length of the driving ban causes the driver to stay away unexpectedly for

a longer period than initially planned, for example an entire weekend in a certain country. We recommend that the legislative institution also investigates in detail the effect that a new or adapted driving restriction might have on the working times of international drivers. However, in case of non-fixed date driving bans, which can “suddenly” come into effect, the social impact can be large. Not only the logistic procedures of the transport operator could be disrupted, the driver might also unexpectedly have to stay away from home for a substantially longer period.

Slight Mutations could have Substantial Consequences

Slight mutations in the transport cost price may alter the routing of freight transport substantially. Thus, especially in long distance transport patterns in which more than one alternative routing is possible between origin and destination a slight altering of the driving ban regime in a certain country may have substantial rerouting effects on the transport flows. This rerouting also means that, although the social and environmental problems of a certain country could diminish, the problems are shifted to neighbouring countries and they may have to pay the price. For these countries the rerouted traffic may not only cause a decrease in local traffic safety, they also might be forced to invest in new infra-structure such as for instance truck parking areas.

Communication of Information

Well communicated information on the details of driving restrictions makes it possible for international transport operators to limit the direct cost price effect. However, after investigating the main communication channels of information on new or adapted driving restrictions, the actual communication on driving restrictions appears to be suboptimal. Especially communication about a new or adapted restriction could be improved. We have examples that show that essential information has been communicated solely in the national language. We therefore have recommended that all parties involved should communicate this information at least also in the English language and in a more or less standardized way.

1 Introduction

1.1 Background

One of the cornerstones of EU-policy is the improvement of the (free) international flow of persons and goods. Any action that hinders these flows will draw the attention of the European Commission. Legal entities (national, regional and local governments) impose driving restrictions on transiting Heavy Goods Vehicles (HGVs). These restrictions may have a negative effect on the efficiency of daily transport operations and thus on the profitability of (international) road haulage. Other negative effects can be seen in the suboptimal routing of trips which will cause, among others, additional emissions of pollutants, congestion and additional traffic casualties. Although several stakeholders maintain lists, there appears to be no structured comprehensive overview of these restrictions across Europe. Nor does there appear to be any information available on the financial-economic effects of these restrictions on the functioning of the internal market. Apart from these more quantitative factors one may also have to distinguish various more qualitative or social impacts of the restrictions for the society as a whole and the drivers in particular.

1.2 Objective

Main Objective

The main objective of this study is to provide the Commission with the appropriate information which will give an insight into the impact of driving restrictions on the functioning of the internal market.

Main Question

Are these (uncoordinated) driving restrictions hindering the optimal operation of international freight transport by HGVs and thus the free flow of goods in the EU? And if so, what is the impact?

Main Result

The first main result of this study is a clear and well-structured overview of driving restrictions that are hindering international freight transport by HGVs. A second result is the assessment of the direct and indirect effects of these restrictions on the European transport market. Subsequently clear sets of conclusions and recommendations were made.

Scope

Driving restrictions exist for all road classes ranging from the local road network to the international TEN-T highway network. However as this study is only addressing international commercial road freight transport the scope of this study is strictly limited to the latter. Thus in principle all driving restrictions with a strict local impact (e.g. city entrance restrictions) were not taken into account. Concerning the type of vehicles; only the driving restrictions that are in effect for road freight vehicles with a Gross Vehicle Weight of 3,5 tons or more were taken

into account in this study. These vehicles are generally referred to as Heavy Goods Vehicles (HGVs).

The study was performed for 29 European countries (EU27, Norway and Switzerland).

1.3 Structure of this Final Report

After this introductory chapter, in the second chapter the results of the classification of the restrictions is presented as this classification is partly input for the data collection. The third chapter presents the main results of the data collection phase, together with some first conclusions. As several thousands restrictions were listed, we decided to present the results, in both tables and graphically. The main advantage hereof is that the broad picture becomes clear at a glance. In chapter four the methodology of the impact assessment is explained in more detail. Chapter five presents the results of this impact assessment. The direct costs effects were determined by means of input from three case studies. Detailed information on these cases is also presented in this chapter. Conclusion and recommendations have been listed in the final chapter.

Annex 1 lists details on relevant internet websites.

In Annex two detailed information is presented on the number of international freight transports (determined on base of freight flows) between the European countries. A certain restriction on a certain route has more impact if the transport volume that transits this route is large. This information is essential for the selection of corridors for performing the impact assessment of driving restrictions.

In the third Annex a section of the “restrictions database” is presented. In the fourth Annex the main basic figures of the cost structure of freight vehicles that are used in international commercial road haulage are listed. The annexes are concluded with some examples related to the communication of information on restrictions.

2 Classification of Restrictions

Introduction: fixed and non-fixed date

At a first glance it seems that the driving restrictions in Europe have no clear structure and no common basis. However when you look again some clustering seems to be practical. The first division that can be made is between driving restrictions that are linked (“fixed”) to certain calendar days or periods and those that are not (“non-fixed”). Information on the first group of restrictions is normally communicated well before the actual date of the ban (see also figure 2.1). The second group consists mainly of restrictions that are related to certain circumstances that trigger the restriction. Typical examples are restrictions that are related to certain weather conditions or to certain commodity groups (see also figure 2.2).

In the next chapter (“Results of the data collection”) a full overview of all relevant data per restriction is presented.

Figure 2.1 Main classification fixed (calendar) date restrictions

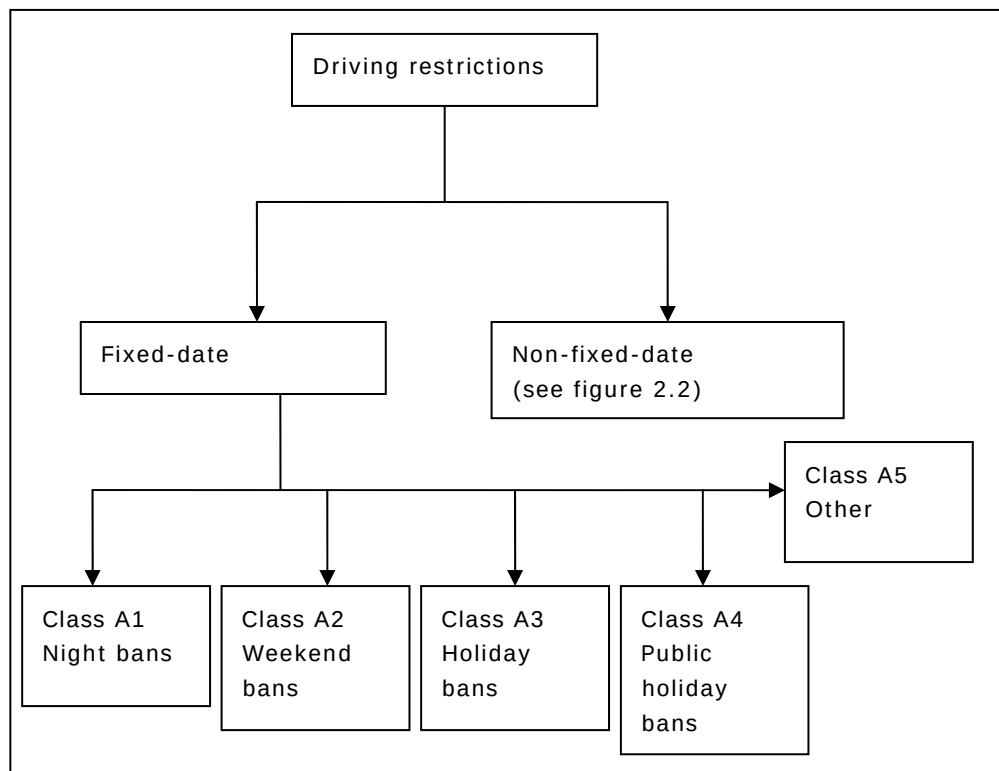
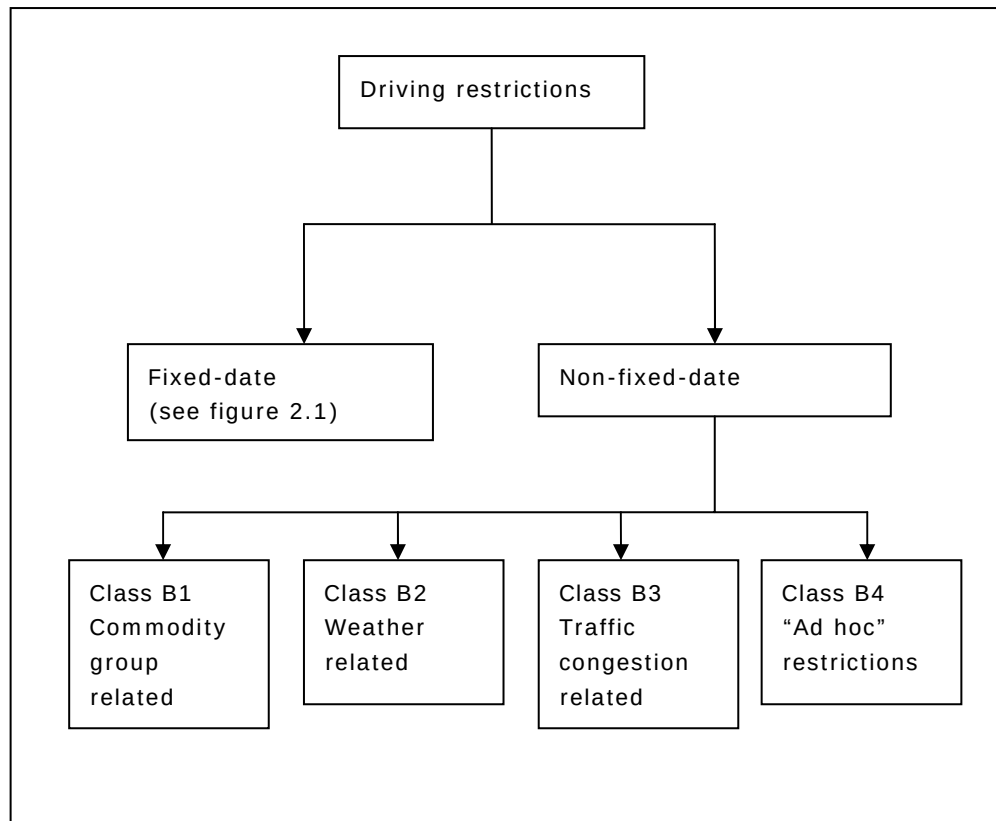


Figure 2.2 Main classification non-fixed (calendar) date restrictions



Accumulation of Restrictions

After carefully studying the list of restrictions on the “day-number” level a certain accumulation of restrictions emerges. This means that a certain restriction coincides with one or more other restrictions. However, the combined actual effects of bans and exemptions can be seen only at the trip level. The effects of such an accumulation will be presented in chapter 5. An example is the “night bans” and “weekend bans” as implemented in Switzerland.

Important sources of information

The main sources of information on driving restrictions are the “Country Documentation 2010 Reports” submitted by transport operator branch organisations like FeBeTra (Koninklijke federatie van Belgische transporteurs en logistieke dienstverleners), Transfrigoroute (The Inter-professional Organisation Serving Temperature-controlled Transport and Logistics), IRU (International Road Transport Union) etc. Additional information was obtained from transport operators, sometimes in the form of a case study. In the next chapter we will address the sources of information in more detail.

2.1 “Fixed-Date” Driving Restrictions

A full and detailed overview of the main characteristics of the fixed-date driving is presented in the next chapter. In this chapter only a more general overview is presented.

A. Fixed-date driving restrictions

Class A1: (general) Night bans (see figure 2.3)

Only two countries (Austria and Switzerland) maintain night bans during the calendar year. This means that in general, freight vehicles with a certain loading capacity or higher are not allowed to transit, enter or leave these countries at night. However, Austria allows general exemptions on this restriction if the freight vehicle meets certain qualifications. New freight vehicles (Euro-5 class) generally meet these requirements (or after some minor technical adaptations).

Example:

Day	Date	Type	Country	Start time	End time	VC ¹	Road section	Exc ²
Wednesday	21-04-2010	Night	Switzerland	0:00	5:00	3,5	Whole network	No
Thursday	22-04-2010	Night	Switzerland	22:00	0:00	3,5	Whole network	No
Thursday	22-04-2010	Night	Switzerland	0:00	5:00	3,5	Whole network	No

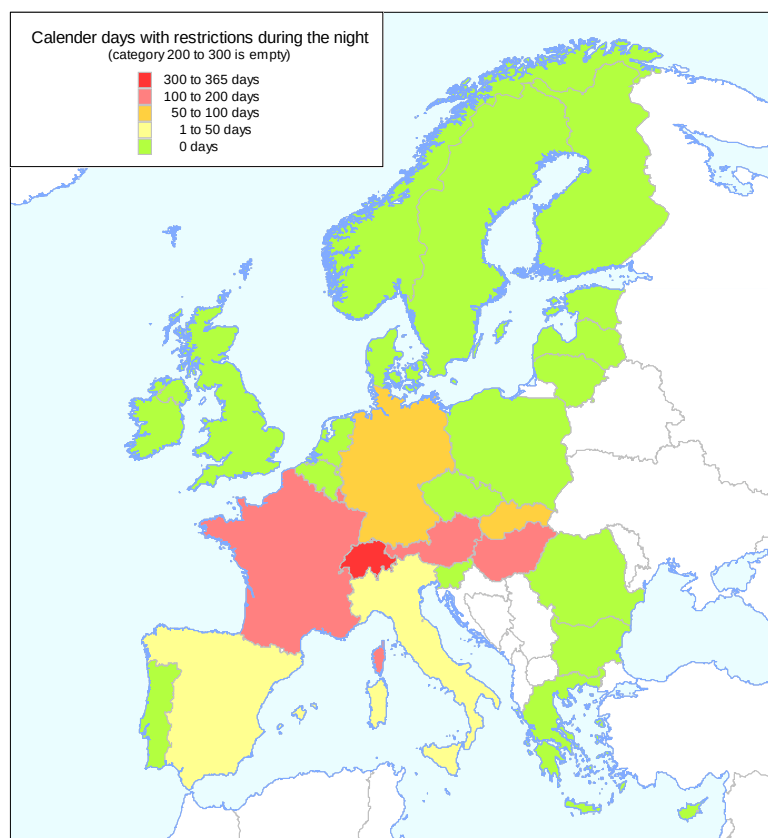
1) VC= vehicle category; "3,5"

The restriction stands for trucks with a GVW of 3,5 tonnes or more.

2) Exc= Exemptions of the general rule.

Source: NEA-restrictions database

Figure 2.3 Map of countries with (general) night bans



Class A2: (general) Weekend Bans (see figure 2.4)

The second class of driving restrictions concerns weekend bans. The impact of these bans is much more substantial because 12 European countries (see also table 3.3 of the next chapter) maintain these restrictions.

Example:

Day	Date	Cat.	Country	Start time	End time	VC ¹	Road section	Ex
Saturday	02-10-2010	Weekend	Austria	15:00	0:00	3,5	whole network	Yes
Sunday	03-10-2010	Weekend	Austria	0:00	22:00	3,5	whole network	Yes

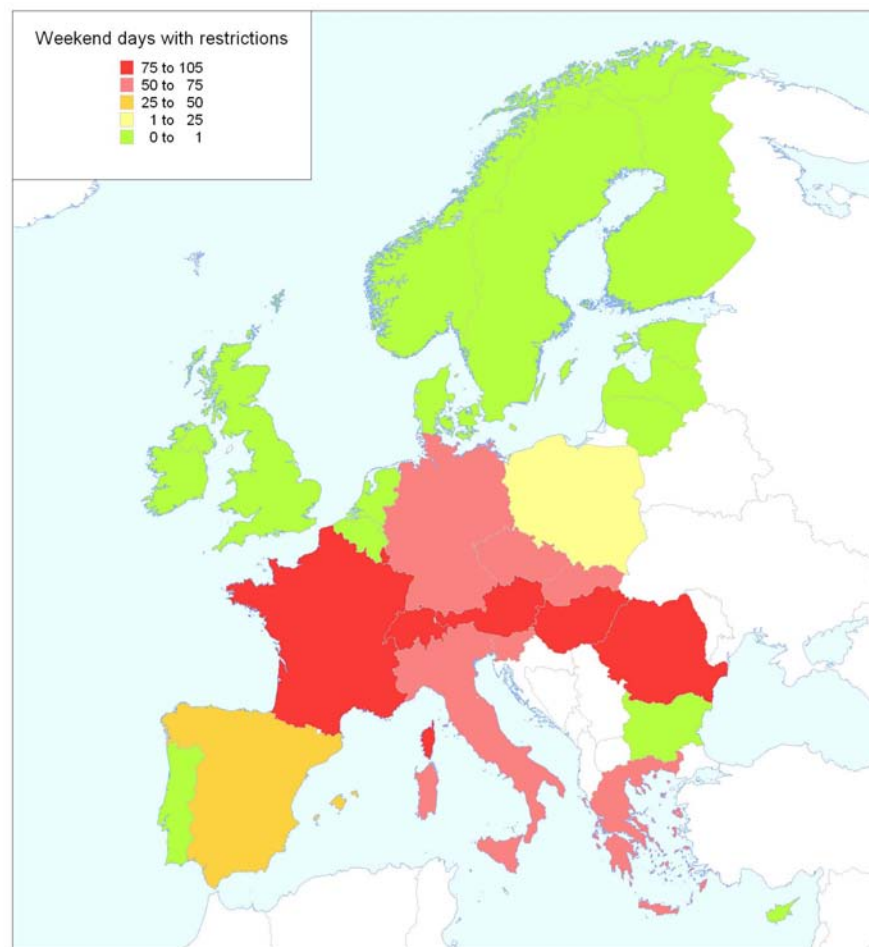
- 1) For vehicle combinations; for rigid trucks the limit is 7,5 tonnes GVW.
- 2) Exemptions (marked in black: of special importance for international transport):
 - Concerning trucks with trailers exceeding 3.5t: vehicles transporting milk
 - **Concerning vehicles with an authorised total weight of more than 7.5t: vehicles carrying meat or livestock for slaughter (but not the transport of heavy livestock on motorways) perishable foodstuffs with a remaining shelf life of maximally one week from the start of the transport (but not deepfreeze goods)** the supply of refreshments to tourist areas, urgent repairs to refrigeration plants, towing services (in all cases, according to § 46 StVO, it is obligatory to leave the motorway at the nearest exit), breakdown assistance vehicles, emergency vehicles, vehicles of a scheduled transport company (regular lines), and local trips on the two Saturdays preceding 24 December.

NB: Concerning “perishable foodstuffs”: it seems that it is not totally clear among the transport operators:

- **Which products this exemption actually concerns, or**
- **that if a shipment also contains some products that are not exempted the total transport is not exempted.**
- Vehicles belonging to the highway maintenance service; vehicles belonging to the Federal Army, and which are essential for the pursuit of military operations.
- **Trips to certain transshipment zones and made as part of a combined rail-road goods transport operation (CIM/UIRR document must be given as proof).**

Source: NEA-restrictions database

Figure 2.4 Map of countries with (general) weekend bans



Class A3: Holiday bans (see figure 2.5)

Holiday bans are related to the expected massive volumes of holiday traffic. Typical holiday bans are the restrictions related to the Summer and Winter holidays.

Example:

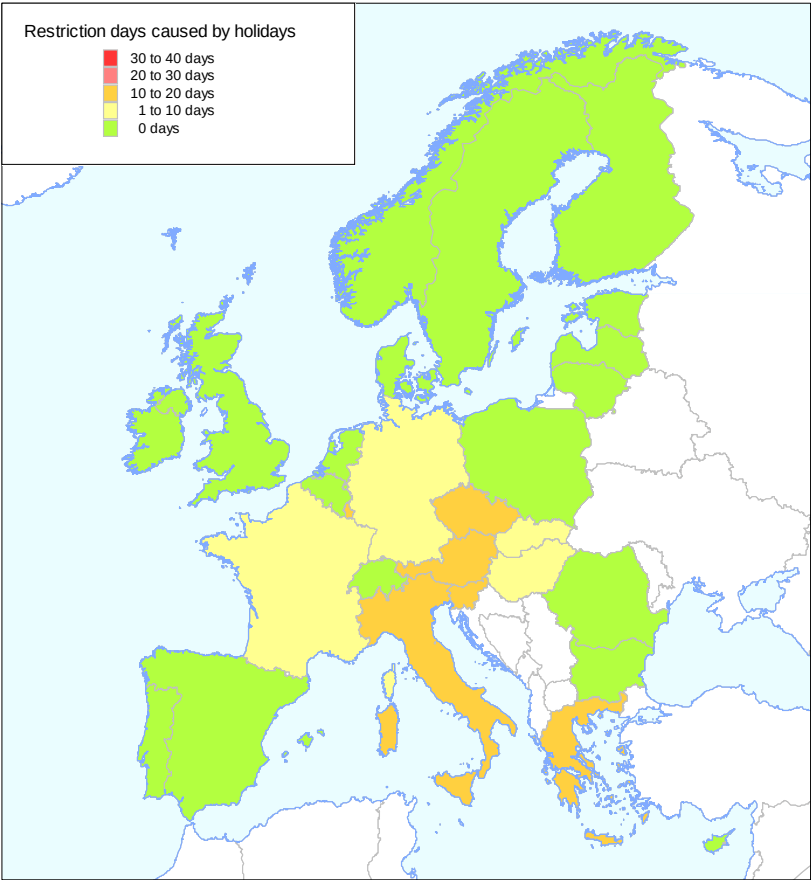
Day	Date	Type	Country	Start time	End time	VC ¹	Road section ²	Ex ³
Saturday	03-07-2010	Holiday	Germany	7:00	20:00	7,5	limited network	Yes
Saturday	10-07-2010	Holiday	Germany	7:00	20:00	7,5	limited network	Yes

- 1) VC= vehicle category; "7,5"
The restriction stands for trucks with a GVW of 7,5 tonnes or more.
- 2) Road sections to which the ban applies (partial list only):

Road ID	EXPLANATION
A1	from the Koln-west via Wuppertal, the Kamen intersection and Munster to the Cloppenburg junction and from the Oyten junction to the Horst intersection
A2	from the Oberhausen intersection to the Bad Oeynhausen intersection
A3	from the Oberhausen intersection to the Cologne-east intersection, from the Mönchhof intersection via the Frankfurt intersection to the Nürnberg intersection
Etc	Etc.

- 3) Ex= Exemptions of the general rule.
 - **Combined rail/road goods transport from the shipper to the nearest loading railway station or from the nearest designated unloading railway station to the consignee up to a distance of 200 km (no limitation on distance during the additional summer restrictions); also combined rail/road goods transport between the place of loading or unloading and a port situated within a radius of 150 km maximum (delivery or loading).**
 - **Deliveries of fresh milk and other dairy produce, fresh meat and its fresh derivatives, fresh fish, live fish and their fresh derivatives, perishable foodstuffs (fruit and vegetables).**
 - **Empty vehicles, in connection with the transport operations mentioned under the preceding item.**
 - Transport operations using vehicles subject to the Federal Law on the obligations of service; the relevant authorization must be carried on board and produced for inspection on request.
 - Also exempted from the prohibition are vehicles belonging to the police and federal border guard, fire brigades and emergency services, the federal armed services and allied troops.
 - For operations which are not covered by the abovementioned exceptions, autorisations must be obtained. These, however, will be issued only in the event of an emergency, when delivery by other means of transport is not possible.

Figure 2.5 Map of countries with holiday bans



Class A4: Public holidays (see figure 2.6)

There are two types of public holidays, e.g. holidays related to (more or less) European wide festivals of (mainly) Christian origin and country specific festival like the national day ("14 Julliet") in France. These festivals are mainly of limited duration.

Example:

Day	Date	Type	Country	Start time	End time	VC ¹	Road section	Ex ²
Wednesday	14-07-2010	Public holidays	France	0:00	22:00	7,5	Whole network	Yes

1) VC= vehicle category; "7,5"

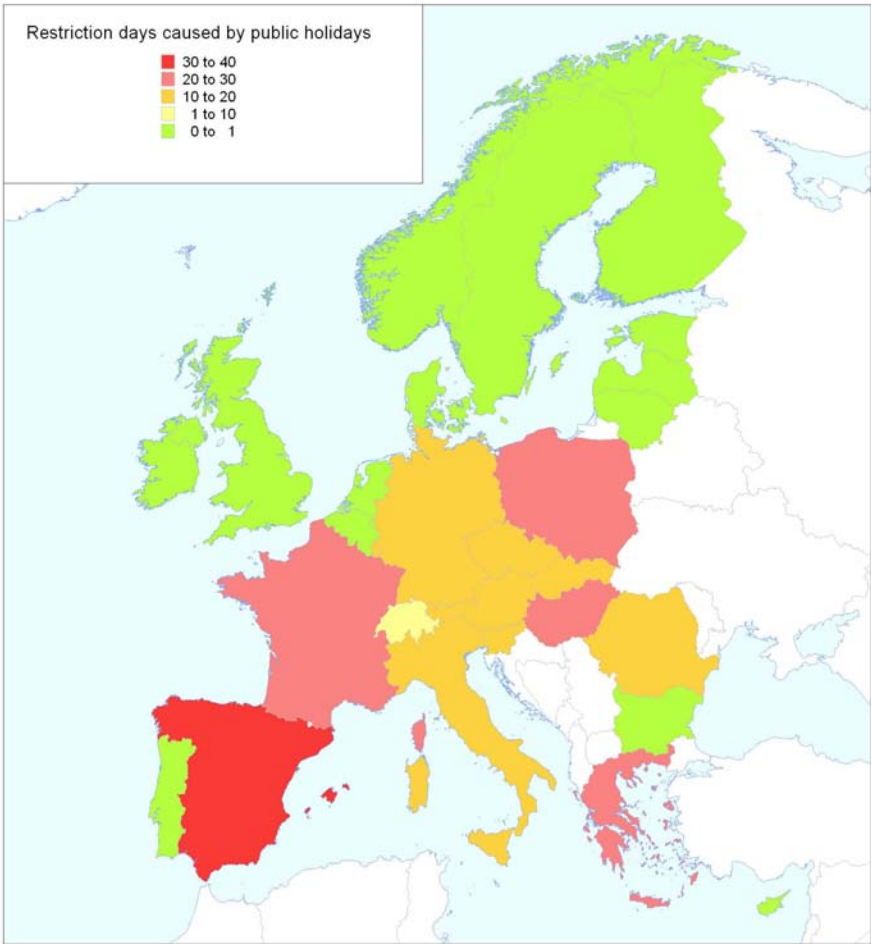
The restriction stands for trucks with a GVW of 7,5 tonnes or more.

2) Permanent derogations, which are not subject to special authorization, are granted for the following transport operations (selection):

- **vehicles transporting, to the exclusion of all else, live animals or perishable goods or foodstuffs**, provided that the quantity of goods constitutes at least half of the truck's payload or occupies at least half of the loading surface or volume of the vehicle. In the case of multiple deliveries, these minimum loading conditions no longer apply beyond the first point of delivery provided that further deliveries occur within a zone restricted to the region of origin of the First delivery point and the neighbouring departments or the region of origin of the first delivery point and adjacent regions within a distance of 150 kilometres. The vehicles concerned are not subject to minimum load conditions and may travel empty if their movements consist of loading operations restricted to a zone consisting of the region of origin and its neighbouring departments or the region of origin and adjacent regions within a distance of 150 kilometres. Vehicles transporting racehorses are not subject to minimum load conditions. Vehicles which have been used to transport homing pigeons are authorised to travel empty throughout the road network. Are considered perishable goods and products : eggs; live fish, crustaceans and shellfish; foodstuffs requiring refrigeration; frozen and deep-frozen foodstuffs, in particular meat products, seafood, milk and dairy products, egg-based products, yeast and vegetable products including refrigerated fruit juices and ready-to-use chopped raw vegetables; all foodstuffs which must be kept warm; fresh fruit and vegetables, including potatoes, onions and garlic; cut flowers, and potted plants and flowers; honey; animal carcasses.
- Vehicles engaged in the seasonal collection and transport of agricultural produce from the place of harvesting to the place of storage, processing, packaging or transformation, within an area made up of the region of origin and the neighbouring departments or the region of origin and adjacent regions within a distance of 150 kilometres.
- Vehicles engaged in the seasonal transport of beet pulp from the processing plant to the place of storage or use. These vehicles may not use the motorway network.
- Vehicles whose load is indispensable for the installation of economic, sporting, cultural, educational or political events which have been duly authorised, on condition that the said event is to take place on the same day or, at the latest, on the day following the transport.

Source: NEA-restrictions database

Figure 2.6 Map of countries with public holiday bans



Class A5: Miscellaneous

- Road section restrictions;
One country in particular, Romania, and to a lesser degree also Spain, have a large range of driving restrictions during daylight and all related to certain parts of the road network. It seems that the main reason behind this long list of restrictions is related to the quality of the network itself. However, transport operators have clearly expressed their dislike of such driving restriction regimes because, amongst others, it largely complicates the planning procedures.
- Planned road works;
Planned road works may cause serious delays for international road freight transport in the form of speed limitation and/or detours. However, mainly because of the nature and origin of these restrictions, this type is not addressed in detail in this study.

Example of road section related restrictions:

Day	Date	Type	Country	Start time	End time	VC ¹	Road section ²	Ex ³
Friday	05-02-2010	Day	Romania	6:00	22:00	7,5	Limited network	Yes

- 1) VC= vehicle category; "7,5"
The restriction stands for trucks with a GVW of 7,5 tonnes or more.
- 2) Road sections on which the ban stands:

Road ID	Road section
DN1 (E60)	Bucharest ring road - Otopeni - Ploiesti (entry) (applies to vehicles of over 3,5 t MPW)
DN1 (E60)	Ploiesti (exit) - Brasov (entry)

- 3) Exempted are:
Vehicles of the civil protection service, funeral transport, first-aid and humanitarian transport, mail transport, fuel distribution, breakdown vehicles, vehicles belonging to sanitation services, transport of livestock, transport of perishable goods (including fresh bread) and goods under controlled temperature provided the goods take up at least half of the loading capacity of the vehicle.

Source: NEA-restrictions database

2.2 “Non-fixed-date” Driving Restrictions

The second group of driving restrictions for heavy freight vehicles is not (directly) related to a certain calendar date but to other factors like (extreme) weather or traffic conditions.

The full overview of the main characteristics of this type of restrictions is listed in the next chapter (see table 3.4). In this chapter a more general overview is presented.

Although the actual number of this type restrictions is fairly limited in comparison to the fixed-date restrictions, transport operators remark that non-fixed date driving restrictions can have near devastating effects on the trip performance. This is especially the case when the actual date of the restriction is only communicated very close to this date. Another problem arises when the details of the restrictions are not communicated in an optimal and/or standardised way. It happens once every while that some operators missed the information and are then caught by surprise.

B. Non-fixed-date Restrictions

Class B1: Commodity group

Driving restrictions in this group relate to the actual commodities that are transported. If a certain shipment contains these commodities a general driving prohibition is in effect.

Example:

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc. ⁴⁾
Commodity	Austria	all	Limited network	Yes

1) Commodities affected:

- Waste products (conform: Directive 2000/532/EC), soil, rock
- Tree trunks, cork
- Powered vehicles
- Steel, tiles (“Fliesen”)

Per 1 July 2010 also:

- Iron and non-iron ores
- Marble
- Travertine

2) Vehicle category: All freight vehicles

3) Road section: A12 between km 6,35 and km 72,00 (as per 1-1-2011: km 90,00)

4) Exempted are:

- Freight vehicles with loading and/or unloading location in the area between km 6,35 and km 72,00
- If the shipment is part of an intermodal transport assignment.

Class B2: Extreme Weather

Extreme weather conditions (high or low temperatures, strong thaw) could have devastating effects on the road surface. Some countries therefore have introduced driving restrictions for such weather conditions. Although publicly announced before the actual restriction is in force, the time between the enforcement and the announcement can be short.

Example:

Cat.¹⁾	Country	VC²⁾	Road section	Exc.
Extreme weather	Bulgaria	20 ton	Whole network	No

- 1) Temperature 35°C or more. The exact details are communicated two days before the ban gets in effect.
- 2) All freight vehicles with a total GVW of 20 tons or more.

Class B3: Congestion Related

Two European countries maintain driving restrictions during (expected) extreme congested traffic situations mainly related to the start and finish of the holiday season.

Example

Cat.¹⁾	Country	VC	Road section²⁾	Exc.
Congestion related	France	7,5 ton	Whole network	No

- 1) Vacation season related traffic peak driving restrictions.
- 2) The following months traffic flow related driving bans can be proclaimed by the national; government:
 - In the months February and March in the French Alps;
 - In the months July and August on several Saturdays.

Class B4: "Ad hoc" restrictions

The last class of non-fixed-date restrictions consists of all traffic restrictions that occur as a result of a "sudden" incident like a traffic accident or "sudden" road works. These incidents may cause road blocks and detours or speed limitations and thus hinder (international) road traffic. However, mainly because of the nature and origin of these restrictions, this type is not addressed in detail in this study.

3 Data Collection

3.1 Overview of Restrictions

Introduction

The stock taking exercise of driving restrictions for heavy goods vehicles active in the international transport of freight was started with the definition of a conceptual framework. This framework defines the main clusters of restrictions (see chapter 2) and the method to collect the data on these clusters.

In principle two main clusters of restrictions can be seen, namely:

- “Fixed-date” restrictions on which the information was communicated well before the actual calendar date(s) on which they are in effect.
- “Non-Fixed-date” or “Sudden” restrictions on which the information was communicated just before the actual calendar date of commencement, at most a week beforehand.

The manner in which the information on both main types of restrictions is communicated to the transport sector, differs substantially between the two. These differences will have their implications on the way in which the overview of restrictions was performed.

Fixed-date Restrictions: First Level and Second Level

Although in principle no difference should occur between the formal (= handed over by official institutions) and actual restrictions, in daily practice there could be differences because some formal restrictions are not so strictly maintained. Or in other cases actual restrictions are in place but not (clearly) mentioned in the official lists. The main source of *first level* information, mainly fixed or general calendar date related information on driving restrictions, can be received from the branch organisations for transport operators, from open source internet and all kinds of (periodical) publications (“country documentation reports”). This kind of information is generally communicated well in advance by official representatives like Ministries of Transport. However, it seems that the presentation of *second level* information, such as information on exemptions of a certain restriction — for instance, on the actual product types — generally are not part of these branch communications. If, in such a case, a request emerges from a member, the member’s organisation will generally perform an ad hoc information search among sister organisations, a rereading of legislation, will contact (foreign) Ministries of Transport etc. This means that the information supply to the individual transport operator in such cases is far less transparent and may lead to (planning) surprises and to incidents with enforcers.

Non-fixed-date Restrictions

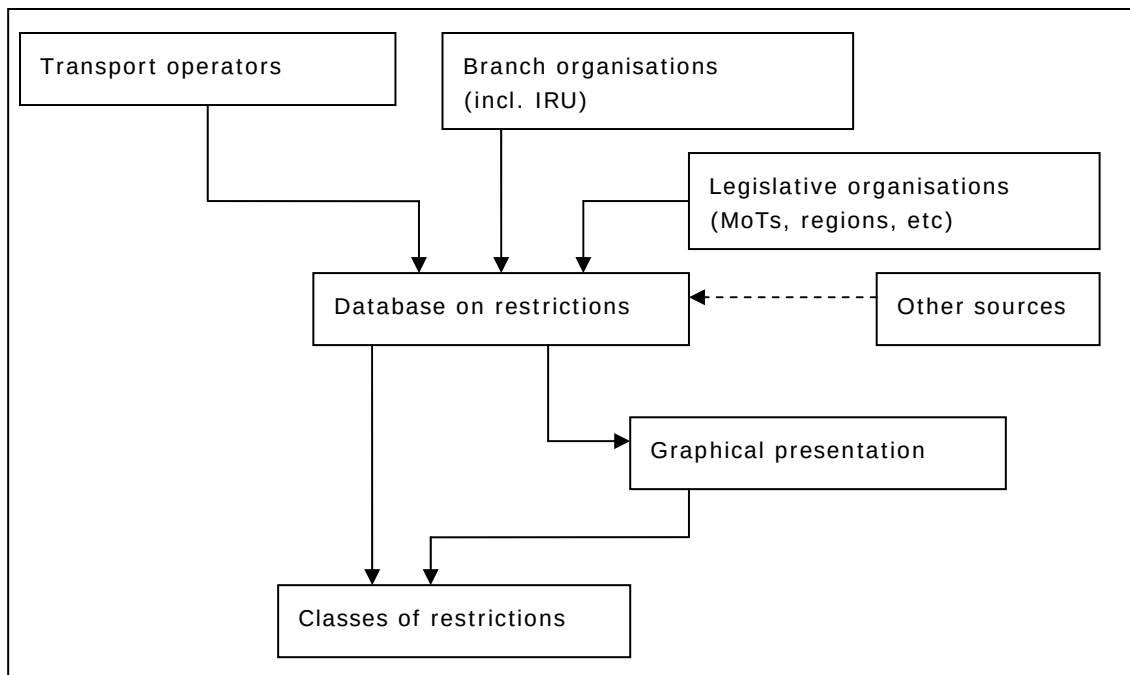
Although non-fixed-date restrictions may suggest that they “emerge” randomly, this is not the case. An example can help clarify this matter. In a certain country, for instance France, a driving restriction is maintained which relates to special weather conditions. Especially after a period of heavy frost a (region of a) country may decide to block heavy traffic because the large trucks may damage the road severely.

Although there is a general weather related driving restriction, the information about the date of the driving ban will only be communicated briefly before the actual date. It is easy to imagine that such a restriction may have a substantial effect on the actual routing of freight vehicles transiting this area.

Three Main Sources

Although a large array of (potential) sources of information on driving restrictions have been found, three main sources of information were thoroughly investigated (see also figure 3.1 and annex 1). The first one, “branch organisations”, presents a new overview of restrictions currently in force at least once a year. If certain mutations occur during the year, its members receive a message about the mutation. The (large) transport operators have been the second important source of information on restrictions. Normally they start the planning processes at the beginning of the new calendar year with a copy of the overview for the coming year presented by the branch organisation of which they are member or else collect the information from open sites on Internet. After each trip the drivers must present a drivers’ report which, amongst others, presents the actual restriction the driver was confronted with during the trip. The last source of information are the legislative institutes that establish the restrictions themselves. Commonly, they communicate adaptations through official publications and through an internet site. An observation was made in this respect of potentially problematic situation. It seems that not all communication on actual driving restrictions is (also) in one of the three main European languages (English, German, French). This fact was observed for Greece, (partly) the Netherlands, Poland, Portugal and Spain. An example hereof is listed in annex 5.

Figure 3.1 Main sources of data on restrictions



Other information platforms

Next to the sites of the Ministries of Transport and the IRU-members in the different European countries, there are other information platforms (sometimes) set up by national authorities and/or transport associations. These sites inform about traffic conditions and road works (sometimes even in real-time), restrictions and bans for heavy freight vehicles. We searched the internet by keyword for suchlike information platforms. We examined the first 20 links provided by the internet search engines. We have performed the web-search including the following keywords: ban, restriction, traffic information, road works/ road construction, dangerous goods/ ADR in combination with truck, heavy goods vehicle/ HGV, professional transport and the different countries. We assume that any transport operator searching for information on driving bans would have used any of these keywords. We also assume that if we were not able to retrieve the information in this way, the transport operator would neither have been able to find the information. Next, we also examined the links in websites that we found for other relevant portals. Table 3.1 shows a section of the information portals that we found during the internet search, including information on the contents of the website, the language(s), and the clarity of the websites. We concluded that the contents sometimes is quite cryptically or the (more detailed) information is provided only in the native language and only some general remarks in other languages. The full contents of the table is listed in annex 1.

Table 3.1 Information portals and short outline of the contents found during the internet search (selection only; full details in annex 1).

EU-countries		Websites found in internet search			
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on the website
1	Austria	http://www.oeamtc.at/verkehrsservice/	Only traffic information, updated regularly - no information for heavy good vehicles available (except for overview of LKW-Maut tracks). No information provided concerning driving restrictions or bans for neighboring countries.	German	N/A
2	Belgium	http://trafiroutes.wallonie.be/trafiroutes/accueil.do	Information on motorways in Walloon region (i.e. traffic information and events, including road works, weather information, including snow information, and news items). No specific aim at HGVs. No information provided concerning driving restrictions or bans for neighboring countries.	French, Dutch, English and German	Information is clear, it is also possible to search for events (real-time and forecasts events) at different periods.
3	Bulgaria	-	No information on Bulgaria was found, we performed a web-search including the keywords: ban, restriction, traffic information, road works / road construction, dangerous goods / ADR in combination with truck, heavy goods vehicle or professional transport and Bulgaria.		
4	Cyprus	-	No website available		
5	Czech Republic	http://www.uamk.cz/cs/	Information on traffic, events, and road works. No special section for freight transport (or heavy goods vehicles). No information provided concerning driving restrictions or bans for neighboring countries.	Czech	Website is clear, but does not specifically aim at heavy goods vehicles. At the moments the website was checked there was no information on restrictions and bans.
6	Denmark	http://www.trafikken.dk/trafikken.asp?page=company&objno=7	Only traffic information, updated regularly - no information for heavy good vehicles available. No information provided concerning driving restrictions or bans for neighboring countries.	Danish & English	N/A

Remarks on the accessibility and contents of information platforms

The extensive internet search resulted in some additional websites found for most (of the 27+2) European countries. Two sites with information on bans and restrictions in several European countries appeared in several search runs (see “EU”, annex 1). These sites provide especially information on so-called fixed-date driving restrictions.

For non-fixed-date driving restrictions we especially addressed the websites that provide information on traffic information and road works, since these restrictions are also non-fixed date events affecting all traffic (thus also including HGVs). Annex 1 provides information on these websites. Many of these websites provide useful information (also sometimes real-time) on the traffic conditions (traffic information), on (planned) road works and on resulting bans and detours. Also these sites provide detailed information on (regional) weather conditions and the resulting effects on mountain passes, etc. However, specific information for HGVs and HGV-related bans or restrictions is usually not included on these portals. We hardly were able, although we extensively searched the web, to find portals aiming at HGVs or including specific sections for this type of freight vehicles. This does not necessarily imply these portals do not exist, but, if they do exist, we dare to conclude that these sites are hard to find. Therefore, we concluded that it is difficult to find information on (especially non-fixed date) restrictions and bans, if it is available at all.

We also found that some portals that maintain information in several languages, provide more detailed information in the native language only. Especially real-time information is often not available in the English section of the website. For example, the Norwegian site: www.vegvesen.no includes a specific version (i.e. Kjøretøy/Yrkettransport), which is not included in the English version. So, even if we were able to find the websites with relevant information, the information on the translated sections of the sites was often limited. This leads to the conclusion that many of the portals with (real-time) information on traffic (restrictions) and road works can be characterised as either cryptically (only available in the country's native language) or not aiming at HGVs at all (international freight transport with HGVs is not even part of the site). It would however be very convenient for transport operators to be able to find information on bans and restrictions, amongst other things, due to road works and specially aiming at HGVs at this one portal.

So, we generally conclude (also including the searches in governmental websites and IRU-member sites) that practical information on fixed-date driving restrictions and bans is satisfactory available from several sources and can easily be collected by transport operators. However, the communication of governments is relatively limited, especially for foreigners that do not read the native language. Besides this point, sometimes special knowledge would be required about the organization of the Ministry of Transport and the responsible executive section of the ministry in order to be able to find the information. It is therefore much easier to find information on fixed-date bans and restrictions through IRU-members, and the EU-portals. However, information on non-fixed date driving restrictions, e.g. restrictions related to actual weather and traffic conditions and to some part also road works, is hard to find.

Furthermore, the detail of the information is often limited for people who do not fully understand the native language.

Comparison of Sources

Normally the actual experiences of transport operators with the driving restrictions overlaps exactly with the formal restrictions, as communicated by the legal institute and/or the branch organisation. If not, a note is made in the vehicle routing programme and commonly a message concerning the occurrence will be sent to the branch office. Examples hereof are listed in annex 5. On the other hand sometimes it happens that a certain driving restriction in practice is not seen as a hindrance by the transport operators because there are legal ways to circumvent this restriction. An example is the general night ban in effect in Austria. As all freight vehicles that meet certain technical standards are exempted from this restriction, all the transport operators that have to transit Austria by night only invest in vehicles that meet these standards. Concerning the data itself; after the completion of the data collection it became clear that the majority of the transport operators use only subsets of the official lists of restrictions. This concerns the actual region on which the transport operator is specialized. It is useless to burden the planning and vehicle routing systems with superfluous data.

Outline Information Flows

In figure 3.2 two important information flows on driving restrictions were presented. The first flow (process "1-2-3") starts when an official communication on certain restrictions from the legislative organisation, is made public, for example by a Ministry of a certain Member State. This information is normally distributed through official notifications on the website of the latter. This information is collected by the national representative of the IRU (see relation "1"). In the next step this information is translated (if necessary) into English and forwarded to the IRU (relation "2"). The IRU combines the information into a blue print format and presents the main items in a structured way on its website. If considered necessary, a special memo on (an adaptation of) a certain restriction will be distributed to the national members and individual transport operators in the form of a "Flash Info". The last step in this information chain consists of the national road haulage associations communicating general information on their websites to all transport operators and some more detailed information in the "members only"-section (relation "3"). If relevant also translation of the information into the native language will take place.

The second main information flow (process "a-b-c-d") starts with the communication of (the adaptation of a) certain restriction to the national enforcement body ("police") which is shown by relation "a" (see figure 3.2). These restrictions are enforced during road checks. It may occur that a truck operator (or driver) violates a certain restriction. In most cases the violation will be acknowledged by the driver and the fine paid. However it occasionally occurs that a driver and, after establishing contact, also the management of the company itself, was taken by surprise. They were not aware of this restriction (relation "b"). Normally information on these cases is promptly communicated to the national branch organisation (relation "c"). If the case is severe enough, this organisation communicates the information to the IRU.

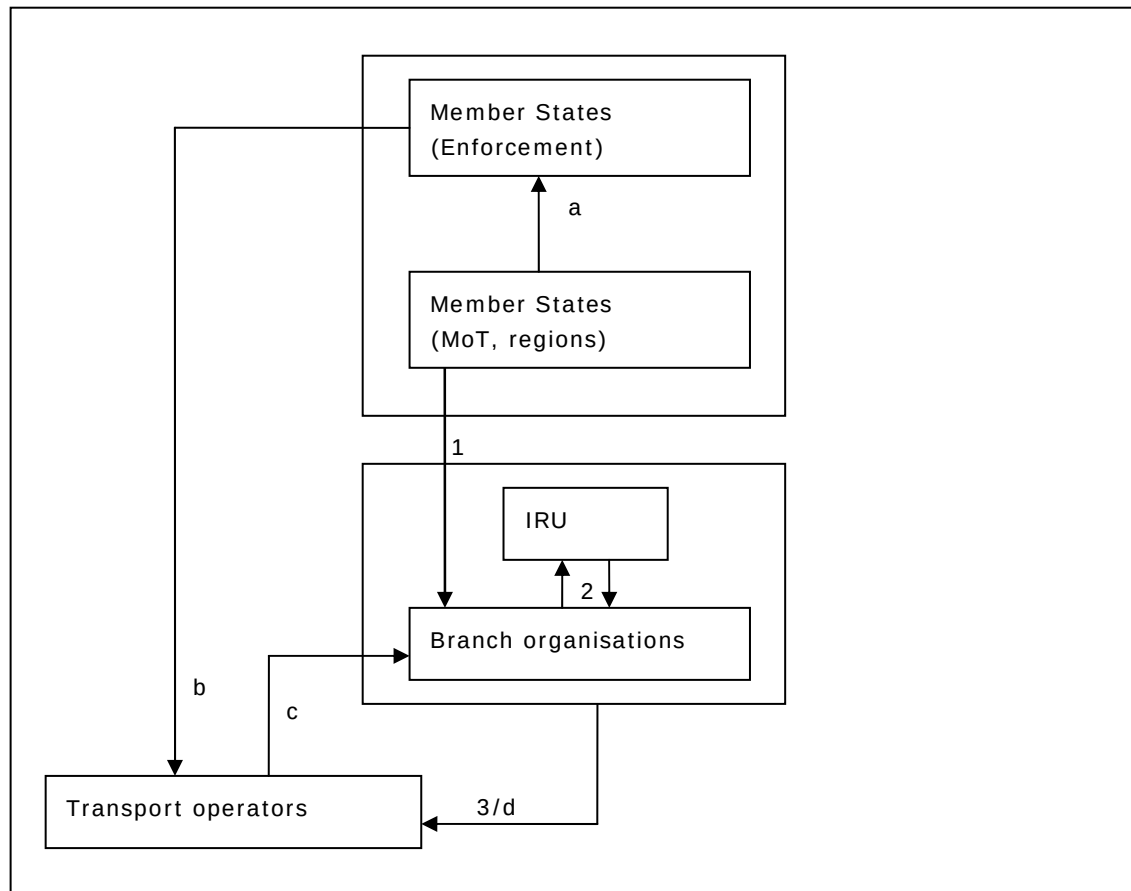
In turn the IRU and/or the national branch organisation communicate the information the road haulier (relation “d”).

The information process as outlined in figure 3.2 was discussed with, amongst others, representatives from the transport operators. In their opinion this process works well, however a few remarks were placed. These remarks generally relate to the communication of information on restrictions from the legislative institutes towards the road transport sector (relation “1”). In particular it has been remarked that:

- The specifics of a new or the adaptation of an existing driving restriction is only communicated in the national language (annex 5 example 1).
- In case of non-fixed driving restrictions and as the example clearly shows, the timing (“until further notice”) this type of restrictions cause serious planning problems (annex 5 example 2). Furthermore, the (few) alternative routes will be confronted with substantial additional traffic.
- The specifics of the new or the adaptation of an existing driving restriction is only communicated shortly before the commencement date of the restriction (annex 5 example 3).

However, in our opinion, all parties involved in the information process must take extra care of their part of this process as we conclude that (nearly) all information flows (shown as relations in figure 3.2) are open to further improvements.

Figure 3.2 Main flows of information on restrictions



Scheduled Transport Operations

There could be a major difference in the manner of dealing with driving restrictions between the transport companies with more or less “fixed schedule” transport operations. For example, a roundtrip between Milan and Duisburg three times per week at fixed times, and the companies that have no fixed schedules. However, it became clear from NEA’s continuous market monitoring research that the latter type of transport operations is losing its share because of the competitive advantages of specialising on a certain country or region.

Linked Database of Driving Restrictions

The collection of information on driving restrictions that are actually in effect has resulted in a relational database with a core of more than 3,000 records. All (official) restrictions for all Member States in effect on the TEN-T road network have been listed with the calendar date and country as primary key. In addition, information was linked to the actual corridor (if any) on which a certain restriction is in effect. If nothing is mentioned in this respect, the restriction applies to the total (TEN-T road) network in a certain Member State. A last bit of information that was linked to a certain restriction, addresses exceptions to the general rule if any. Examples are perishable goods and foodstuffs in relation to weekend driving bans in for instance, France. In Annex 3 a of this database has been presented for informative purposes.

Graphic Presentation

Before we actually started to apply a certain classification scheme, we decided that it would be very helpful to also transfer the data onto a roadmap. With this roadmap of Europe in hand it becomes clear in a glance that concerning driving restrictions, various regions must distinguished. Two kinds of maps have been used, one type listing roadmaps (including freight flow statistics) and one listing (certain types of) restrictions.

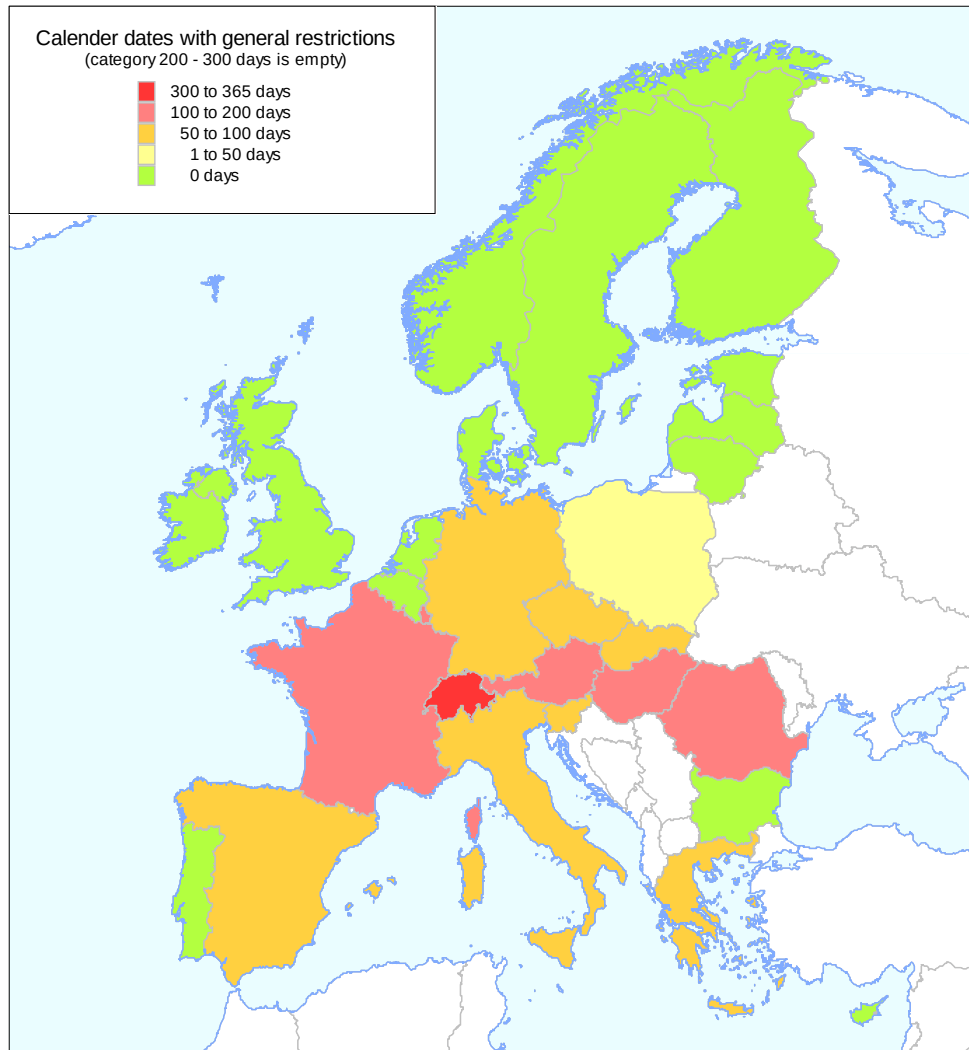
3.2 Regions

Number of Restrictions

A pattern becomes clear when looking at the overall map (see figure 3.3) with the distribution of countries with restrictions. A distinction can be made between four types of regions. However, when looking at the figure, you have to bear in mind that a rather flat overview is presented in the form of a simple counting of types of restrictions that are in effect in a certain country. This approach also means that the actual burden of a certain restriction on the transport operators was not addressed yet. It could be the case that a certain overall driving ban could cause less negative effects for the transport operator than a limited ban with no exemptions at all because of exemptions to the general rule. However, the combined actual effects of bans and exemptions can be seen only at the trip level (see chapter 5).

Remark: the status of the restrictions in some of the countries belonging to the former Yugoslavian Republic is not known.

Figure 3.3 Map of countries with fixed-date restrictions



Region 1: No Restrictions

Through the use of the colour green on the maps we have made clear that in large section of Europe no (overall) restrictions are in effect at all. We have therefore decided not to put any further research effort into analysing these countries. These countries are the Nordic countries, the Baltic States (except Belarus), the Netherlands, Belgium, Great Britain, Ireland, Malta, Bulgaria and Portugal.

Region 2: Limited Restrictions

We have investigated if there are any restrictions in effect or not per calendar day. The number of restrictions in countries which are coloured light yellow lies between 1 and 100 days. The countries belonging to this region are Germany, Czech Republic, Slovak Republic, Poland, Spain, Italy, Cyprus and Greece.

Region 3: Substantial Restrictions

The country is coloured orange in the map if the number of calendar days that have at least one restriction lies between 100 and 200 in these countries. These are France, Austria, Romania and Hungary.

Region 4: More than Substantial Restrictions

If the country is coloured in bright red on the map it has driving bans on nearly every calendar day. Examples hereof are the night bans which are in effect during all days of the year. Only one country, Switzerland, maintains such a strict driving restriction regime.

Remark: We have not found any countries with 200 to 300 calendar days with restrictions.

Type of Freight Vehicle

An alternative way of looking at a certain restriction focuses on the type of freight vehicle that is affected by this restriction. The vehicle type in this respect is mostly defined by its maximum loading capacity.

In table 3.2 an overview has been shown of the limits of the total Gross Vehicle Weight (GVW) or the loading capacities that are observed in Europe and that form the threshold concerning the applicability of a certain restriction. It is clear that there is not much consistency at European level. Notwithstanding this fact, the majority maintains a threshold value of 7,5 tonnes. However, one of the countries with a central position in the transport flows, Switzerland, maintains a level of 3,5 tonnes.

Table 3.2 Overview of threshold values of vehicle and/or cargo weights

Country	GVW	Loading capacity
Austria	3,5 tonnes (combinations)/ 7,5 tonnes (rigids)	none
Czech Republic	7,5 tonnes	none
France	7,5 tonnes	none
Germany	7,5 tonnes	none
Greece	None	1,5 tonnes
Hungary	7,5 tonnes	none
Italy	7,5 tonnes	none
Luxembourg	7,5 tonnes	none
Poland	12,0 tonnes	none
Rumania	3,5 tonnes ¹ / 7,5 tonnes	none
Slovakia	7,5 tonnes	none
Slovenia	7,5 tonnes	none
Spain	7,5 tonnes	none
Switzerland	5,0 tonnes (combinations) /3,5 tonnes (rigids)	none

1) The application relates to certain road identification numbers.

Source: NEA restriction database

Concerning the loading capacity Greece has a driving ban for vehicles with a fairly low limit of 1,5 tonnes. However, this ban is restricted to a limited section of the motorway network and to a limited period of time (see below).

Example: Driving restriction with additional loading capacity limitation (Greece)

(Day)	Date	Type	Country	Start time	End time	VC ¹	Road section ²	Ex ³
Friday	11-06-2010	Holiday	Greece	16:00	21:00	1,5	Limited network	Yes
Friday	18-06-2010	Holiday	Greece	16:00	21:00	1,5	Limited network	Yes
Friday	25-06-2010	Holiday	Greece	16:00	21:00	1,5	Limited network	Yes

Source: NEA restriction database

Notes:

1. Vehicle category: loading capacity 1,5 tonnes or more.
2. Road sections:
 - Athens – Corinth – Patra motorway, in the direction of Patra, between Elefsina toll and Rio toll;
 - Athens – Lamia – Thessaloniki motorway, in the direction of Thessaloniki, between the junctions of Agios Stefanos (Kryoneri) and Bralos, between the junctions of Lamia and Raches Fthiotidos and from Larissa (km 365+400) to the region of Skotina (km 410);
 - Thessaloniki – Kavala motorway, in the direction of Kavala, between the junction of Modi and the bridge over the River Strimonas;
 - Thessaloniki – N. Moudania motorway, in the direction of N. Moudania, between the bridge at Thermi and km 34;
 - Schimatari – Chalkida motorway, in the direction of Chalkida, from the intersection with the Athens-Thessaloniki motorway to the Chalkida bridge (km 12+300).
3. Exemptions:
Vehicles transporting fresh milk, fresh fish, fresh meat or livestock as well as vehicles carrying fresh fruit and vegetables.

3.3 Overview of fixed-date driving restrictions

In table 3.3 an overview is presented of all fixed-date driving restrictions that have been encountered during the inventory of the driving restrictions. In the pages following this table all relevant details of a certain type of restrictions are shown per country, if any.

Table 3.3 Overview of main types of fixed-date driving restrictions

(more detailed descriptions are listed on the next pages)

Country	Night bans	Weekend bans	Holiday bans	Public holiday
Austria	X ¹	X ²	X ³	X ⁴
Belgium				
Bulgaria				
Cyprus				
Czech republic		X ⁵	X ⁶	X ⁷
Denmark				
Estonia				
Finland				
France		X ⁸	X ⁹	X ¹⁰
Germany		X ¹¹	X ¹²	X ¹³
Greece		X ¹⁴	X ¹⁵	X ¹⁶
Hungary		X ¹⁷		X ¹⁸
Ireland				
Italy		X ¹⁹	X ²⁰	X ²¹
Latvia				
Lithuania				
Luxembourg		X ²²		X ²³
Malta				
Netherlands				
Norway				
Poland				X ²⁴
Portugal				
Romania			X ²⁵	X ²⁶
Slovakia		X ²⁷	X ²⁸	X ²⁹
Slovenia		X ³⁰		X ³¹
Spain		X ³²		X ³³
Sweden				
Switzerland	X ³⁴	X ³⁵		X ³⁶
United Kingdom				
Total	2	12	8	14

Source: NEA-restrictions database

In the following overview the next parameters have been listed:

- “Nr”: Number of the record in the database.
- “Day”: The day of the week the restriction is in effect.
- “Date”: Calendar date of the restriction.
- “Cat.”: Fixed date restriction category.
- “Country”: The country in which this restriction is in effect.
- “Start”: Start hour/minute of the restriction.
- “End”: End hour/minute of the restriction.
- “GVW”: Weight limit (start limit) of the truck.
- “Where”: The fraction of the (highway) road network for which the restriction is valid.
- “Exc.”: The description of vehicle and/or commodity groups that are exempted of the restriction.

Detailed description per country of the fixed-date driving restrictions that have been listed in table 3.3.

Austria:

X¹: (general) Night bans Austria (in effect: all calendar days of the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
272	Friday	05-02-2010	Night	Austria	0:00	5:00	7,5	whole network	Exc. AT2
273	Friday	05-02-2010	Night	Austria	22:00	0:00	7,5	whole network	Exc. AT2

Note: only one day is listed but the restriction is the same throughout the calendar year.

Exc. AT2:

- Low-noise vehicles showing the green 'L' plate. The latter are limited to a maximum speed of 60km/h, although a speed of 80km/h may be authorised on certain sections.
- Vehicles belonging to the highway maintenance service.

NB: Derogations to driving restrictions will be authorised only for journeys which serve exclusively for the transport of milk, fresh meat and livestock, perishable foodstuffs (with the exception of deep frozen goods), newspapers and periodicals, essential repairs to refrigeration plant or the operation of road maintenance vehicles to enable traffic flow to be maintained; in all other cases an exceptional authorisation shall be granted only if there is a substantial public interest in doing so. The applicant shall prove in both instances that the journey cannot be avoided by organisational measures or by choosing a different means of transport.

X²: (general) Weekend bans Austria (in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
2944	Saturday	11-12-2010	Weekend	Austria	15:00	0:00	7,5	whole network	Exc. AT1
2953	Sunday	12-12-2010	Weekend	Austria	0:00	22:00	7,5	whole network	Exc. AT1

Note: only one weekend is listed but the restriction is the same for all weekends throughout the calendar year.

Exc. AT1:

- Nationwide, with the exception of journeys made exclusively as part of a combined transport operation within a radius of 65km of the following transloading stations: Brennersee; Graz-Ostbahnhof; Salzburg- Hauptbahnhof; Wels-Verschiebepark; Villach-Fürnitz; Wien- Südbahnhof; Wien-Nordwestbahnhof; Wörg; Hall in Tirol CCT; Bludenz CCT; Wolfurt CCT.
- Concerning trucks with trailers exceeding 3.5t: vehicles transporting milk
- Concerning vehicles with an authorized total weight of more than 7.5t: vehicles carrying meat or livestock for slaughter (but not the transport of heavy livestock on motorways), perishable foodstuffs (but not deep frozen goods), the supply of refreshments to tourist areas, urgent repairs to refrigeration plant, towing services (in all cases, according to § 46 StVO, it is obligatory to leave the motorway at the nearest exit), breakdown assistance vehicles, emergency vehicles, vehicles of a scheduled transport company (regular lines), and local trips on the two Saturdays preceding 24 December.

X³: Holiday bans Austria

Note: the beginning of the holiday period is Saturday the 3rd of July, the end the 28th of

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1715	Saturday	24-07-2010	Holiday	Austria	9:00	15:00	7,5	L.N. ¹⁾ AT1	Exc. AT3
1716	Saturday	24-07-2010	Holiday	Austria	8:00	15:00	7,5	L.N. AT3	Exc. AT4

August. The restriction is in effect on all Saturdays falling in this period. An additional Saturday is the 2nd of October.

1) L.N. (Limited Network): In effect only for a specific section of the road network.

L.N. AT1:

- A12 (Inntal motorway) if the destination is Italy or another country to be reached via Italy.
- A13 (Brenner motorway) if the destination is Italy or another country to be reached via Italy.

L.N. AT3:

A4 Motorway from junction Schwechat to the border at Nickelsdorf, in both directions.

Exc. AT3:

Vehicles that can prove that they are exempted from driving restrictions in Italy or in Germany during these hours.

Exc. AT4:

Transports loading or unloading in the districts of Neusiedl am See, Eisenstadt, Mattersburg, Bruck an der Leitha, Gänserndorf and Wien-Umgebung.

Vehicles carrying meat or livestock for slaughter (but not the transport of heavy livestock on motorways), perishable foodstuffs (but not deep frozen goods), periodicals, the supply of refreshments to tourist areas, urgent repairs to refrigeration plant, towing services (in all cases, according to § 46 StVO, it is compulsory to leave the motorway at the nearest exit), breakdown assistance vehicles, emergency vehicles, vehicles of a scheduled transport company (regular lines), aid operations by accredited organisations;

Trips made as part of a combined rail-road goods transport operation (CIM/UIRR document must be given as proof).

X⁴: Public holiday bans Austria

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1064	Thursday	13-05-2010	Public holidays	Austria	0:00	22:00	7,5	whole network	Exc. AT1
1167	Monday	24-05-2010	Public holidays	Austria	0:00	22:00	7,5	whole network	Exc. AT1

Note: the following dates are listed: 1/1, 5/1, 1/5, 13/5, 24/5, 3/6, 15/8, 26/10, 1/11, 8/12, 25/12, 26/12.

Exc. AT1:

- Nationwide, with the exception of journeys made exclusively as part of a combined transport operation within a radius of 65km of the following transloading stations: Brennersee; Graz-Ostbahnhof; Salzburg- Hauptbahnhof; Wels-Verschlebebahnhof; Villach-Fürnitz; Wien- Südbahnhof; Wien-Nordwestbahnhof; Wörg; Hall in Tirol CCT; Bludenz CCT; Wolfurt CCT.
- Concerning trucks with trailers exceeding 3.5t: vehicles transporting milk
- Concerning vehicles with an authorized total weight of more than 7.5t: vehicles carrying meat or livestock for slaughter (but not the transport of heavy livestock on motorways), perishable foodstuffs (but not deep frozen goods), the supply of refreshments to tourist areas, urgent repairs to refrigeration plant, towing services (in all cases, according to § 46 StVO, it is obligatory to leave the motorway at the nearest exit), breakdown assistance vehicles,

emergency vehicles, vehicles of a scheduled transport company (regular lines), and local trips on the two Saturdays preceding 24 December.

Czech Republic:

X⁵: (general) Weekend bans Czech Republic (in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
343	Sunday	14-02-2010	Weekend	Czech Rep.	13:00	22:00	7,5	L.N.CZ1	Exc. CZ1
395	Sunday	21-02-2010	Weekend	Czech Rep.	13:00	22:00	7,5	L.N.CZ1	Exc. CZ1

Note: only two weekends are listed but the restriction is the same for all weekends throughout the calendar year.

L.N.CZ1:

Motorways, trunk roads and 1st class roads.

Exc. CZ1:

- vehicles engaged in combined transport operations, from the shipper to the nearest loading point or from the nearest unloading point to the consignee;
- vehicles used for essential seasonal agricultural transport;
- vehicles used in the construction, maintenance or repair of roads;
- vehicles transporting perishable goods according to ATP regulations, provided the goods take up more than half of the loading capacity of the vehicle;
- vehicles transporting livestock;
- vehicles transporting fuel for the continuous operation of service stations;
- vehicles used for the loading or unloading of aircraft, ships or trains up to a distance of 100km;
- vehicles carrying postal cargo;
- empty vehicles travelling in connection with any of the transport operations mentioned in the preceding points;
- vehicles needed in cases of natural disaster;
- vehicles belonging to the armed forces, police and fire brigade;
- vehicles carrying chemical substances susceptible to temperature change or crystallisation;
- vehicles used for driver training.

X⁶: Holiday bans Czech Republic

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1636	Friday	16-07-2010	Holiday	Czech Rep.	17:00	21:00	7,5	L.N.CZ1	Exc. CZ1
1647	Saturday	17-07-2010	Holiday	Czech Rep.	7:00	13:00	7,5	L.N.CZ1	Exc. CZ1

Note: the beginning of the holiday period is Friday the 2nd of July, the end Saturday the 28th of August. The restriction is in effect on all Fridays and Saturdays falling in this period.

L.N.CZ1: Motorways, trunk roads and 1st class roads

Exc. CZ1: See weekend driving bans Czech Republic.

X⁷: Public holiday bans Czech Republic

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1536	Monday	05-07-2010	Public holidays	Czech Rep.	13:00	22:00	7,5	L.N.CZ1	Exc. CZ1
1543	Tuesday	06-07-2010	Public holidays	Czech Rep.	13:00	22:00	7,5	L.N.CZ1	Exc. CZ1

Note: the following dates are listed: 1/1, 5/4, 1/5, 8/5, 5/7, 6/7, 28/9, 28/10, 17/11, 24/12, 25/12, 26/12.

L.N.CZ1: Motorways, trunk roads and 1st class roads

Exc. CZ1: See weekend driving bans Czech Republic.

France:

X⁸: (general) Weekend bans France (in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
2105	Saturday	28-08-2010	Weekend	France	22:00	0:00	7,5	Whole network	Exc.FR1
2123	Sunday	29-08-2010	Weekend	France	0:00	22:00	7,5	Whole network	Exc.FR1

Note: only one weekend is listed but the restriction is the same for all weekends throughout the calendar year.

Exc. FR1: Permanent derogations, which are not subject to special authorization, are granted for the following transport operations:

1. Vehicles transporting, to the exclusion of all else, live animals or perishable goods or foodstuffs, provided that the quantity of goods constitutes at least half of the truck's payload or occupies at least half of the loading surface or volume of the vehicle. In the case of multiple deliveries, these minimum loading conditions no longer apply beyond the first point of delivery provided that further deliveries occur within a zone restricted to the region of origin of the first delivery point and the neighbouring departments or the region of origin of the first delivery point and adjacent regions within a distance of 150 kilometers. The vehicles concerned are not subject to minimum load conditions and may travel empty if their movements consist of loading operations restricted to a zone consisting of the region of origin and its neighbouring departments or the region of origin and adjacent regions within a distance of 150 kilometers. Vehicles transporting racehorses are not subject to minimum load conditions. Vehicles which have been used to transport homing pigeons are authorised to travel empty throughout the road network. Are considered perishable goods and products : eggs; live fish, crustaceans and shellfish; foodstuffs requiring refrigeration; frozen and deep-frozen foodstuffs, in particular meat products, seafood, milk and dairy products, egg-based products, yeast and vegetable products including refrigerated fruit juices and ready-to-use chopped raw vegetables; all foodstuffs which must be kept warm; fresh fruit and vegetables, including potatoes, onions and garlic; cut flowers, and potted plants and flowers; honey; animal carcasses.
- 2.a Vehicles engaged in the seasonal collection and transport of agricultural produce from the place of harvesting to the place of storage, processing, packaging or transformation, within an area made up of the region of origin and the neighboring departments or the region of origin and adjacent regions within a distance of 150 kilometers.
- 2.b Vehicles engaged in the seasonal transport of beet pulp from the processing plant to the place of storage or use. These vehicles may not use the motorway network.

- 3.a Vehicles whose load is indispensable for the installation of economic, sporting, cultural, educational or political events which have been duly authorised, on condition that the said event is to take place on the same day or, at the latest, on the day following the transport.
- 3b. Vehicles transporting fireworks, the use of which has been duly authorised for the same day or the following day.
- 3c. Vehicles transporting hydrocarbon gas mixture, liquefied, NOS, UN1965, or petroleum products, UN 1202, 1203, 1223, necessary for duly authorised sporting competitions, on condition that the event justifying the transport operation is to be held on the same day as or, at the latest, the day after the transport operation.
- 4. Vehicles transporting newspapers and magazines only.
- 5. Vehicles carrying out office or factory removals in an urban area.
- 6. Vehicles specially equipped for the itinerant sale of the goods transported, within an area made up of the region of origin and the neighbouring departments or the region of origin and adjacent regions within a distance of 150 kilometres.
- 7. Vehicles belonging to tradesmen and which are used for the sale of their produce at fairs or markets within an area made up of the region of origin and the neighbouring departments or of the region of origin and adjacent regions within a distance of 150 kilometres.
- 8. Vehicles used for the transport of air freight, under cover of an air waybill.
- 9. Vehicles used for the transport of hospital waste or goods necessary for the operation of medical establishments.
- 10. Vehicles transporting medical gases.
- 11. Vehicles transporting industrial gamma radiography equipment. For all vehicles benefiting from a permanent derogation, empty return is authorised within a zone restricted to the region of the last delivery point and the neighbouring departments or the region of the last delivery point and adjacent regions within a distance of 150 kilometres. The vehicles mentioned under points 3, 6 and 7 may travel laden at the end of the event or the sale, within a zone restricted to the region of the place where the event or sale took place and its neighbouring departments or the region of the place where the event or sale took place and adjacent regions within a distance of 150 kilometres. Unless other provisions apply, for the purposes of implementation of the provisions of this article, the region of origin is the region of departure of the vehicle (or of entry into France) for the transport operation concerned.

Art.5 Short-term derogations

Derogations to the driving restrictions laid down in articles 1 and 2 above, so-called short-term prefectural derogations, may be granted for

- 1. vehicles performing a transport operation considered as indispensable and urgent, namely those engaged in a goods transport operation to meet the needs caused by exceptional circumstances such as drought, flooding, or natural or humanitarian catastrophe;
- 2. vehicles engaged in waste transport for the clearing of rubbish dumps or slaughterhouses;
- 3. vehicles used to supply clean laundry to and remove dirty laundry from hotel complexes of a combined capacity of 1000 rooms and more;
- 4. tanker vehicles used for the supply of - service stations situated along motorways; - airports with aviation fuel.
- 5. vehicles transporting dangerous goods destined for urgent loading or resulting from urgent unloading in maritime ports. The corresponding authorisations are issued by the Prefect of the department of departure for a period not exceeding the duration of the prohibition for which the derogations are requested. For transport operations

originating outside France, the authorisation is issued by the Prefect of the department of entry into France.

Art.6 Long-term derogations

Derogations to the driving restrictions laid down in articles 1 and 2 above, so-called long-term prefectural derogations, may be granted for

1. vehicles necessary to ensure the round-the-clock operation of certain production services or units. If dangerous goods transport is involved, these authorisations can only be issued subject to the approval of the interministerial committee on the transport of dangerous goods.
2. vehicles contributing to the provision of public services or emergency services to meet immediate collective needs. Authorisations for the transport operations indicated in point 1 are issued by the Prefect of the department of loading (or of entry into France) subject to the approval of the Prefect of the department of destination (or of exit from France). Authorisations for the transport operations indicated in point 2 are issued by the Prefect of the department of departure. Long-term authorisations are issued for a maximum of one year.

Art.7 Lifting of restrictions - border zones

In order to mitigate the consequences of the lack of harmonisation of traffic bans with those of neighbouring states, the Prefects of border departments have the possibility of granting derogations to the driving restrictions foreseen in articles 1 and 2 above.

Art.8 Lifting of restrictions - exceptional circumstances

In the case of exceptional circumstances, if the vehicles mentioned in article 1 have been immobilised during the 12 hours preceding the beginning of a period of restriction foreseen in articles 1, 2 or 3 above, the departmental Prefects may, in coordination with the Prefects of the neighbouring departments, authorise them to travel during all or part of the period of restriction within a specific zone.

Art.9 Conditions of use of derogations

For any vehicle granted a permanent derogation or a short or long-term individual prefectural derogation, the person in charge of the vehicle must be able to prove to the officers responsible for road traffic checks that the transport operation complies with the provisions of the derogation concerned. The authorisation must be kept on board the vehicle. For it to be valid, it must be completed by the holder prior to the vehicle's departure, indicating the date of the transport operation and the vehicle's registration number. An authorisation may be withdrawn by the issuing authority if the holder does not observe its terms of use or has provided erroneous information in order to obtain it.

X⁹: Holiday bans France

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
436	Saturday	27-02-2010	Holiday	France	7:00	18:00	7,5	L.N.FR1	Exc. FR1
487	Saturday	06-03-2010	Holiday	France	7:00	18:00	7,5	L.N.FR1	Exc. FR1

Note: the beginning of the holiday period is Friday the 2nd of July, the end Saturday the 28th of August. The restriction is in effect on all Fridays and Saturdays falling in this period.

L.N.FR1:

Bourg-en-Bresse – Chamonix A40 from Pont d'Ain (junction A40/A42) to Passy-le-Fayet (junction A40/RD1205); RD1084 from Pont d'Ain (junction RD1084/RD1075) to Bellegarde; RD1206 from Bellegarde to Annemasse; RD1205 from Annemasse to Passy-le-Fayet; RN205 from Passy-Le-Fayet to Chamonix; Lyon - Chambéry - Tarentaise – Maurienne; A43 from the A46 south/A43 interchange to the A43/A432 interchange in the direction Lyon-Chambéry; A43 from the A43/A432 interchange to the Fréjus Tunnel; A430 from Pont Royal (junction A43/A430) to Gilly-sur-Isère (junction A430/RN90); RD1090 from Pont-Royal to Gilly-sur-Isère (junction A430/RN90); RN90 from Gilly-sur-Isère (junction A430/RN90) to Bourg-Saint- Maurice; RD1090 from Bourg-Saint-Maurice to Séz; RD306 (Rhône) and RD1006 (Isère and Savoie) from Saint-Bonnet-de- Mure to Freney; RN201 transit of Chambéry (VRU - urban rapid transit route); Lyon - Grenoble – Briançon; A48 from Coiranne (junction A48/A43) to St Egrève (junction A48/A480); A480 from St Egrève (junction A480/A48) to Pont-de-Claix (junction A480/RN85); RN85 from Pont-de-Claix (junction RN85/A480) to Vizille (junction RN85/RD1091); RD1091 from Vizille (junction RD1091/RN85) to Briançon, Bellegarde and St Julien-en-Genevois - Annecy – Albertville; A41 north from St Julien-en-Genevois (A40/A41 north junction) to Cruseilles (A410/A41 north junction); RD1201 from St Julien-en-Genevois to Annecy; RD1508 from Bellegarde to Annecy; RD3508 Annecy bypass; RD1508 from Annecy to Ugine; RD1212 from Ugine to Albertville, Annemasse – Sallanches – Albertville; RD1205 from Annemasse to Sallanches; RD1212 from Sallanches to Albertville, Chambéry - Annecy – Scientrier; A410 from Scientrier (A410/A40 junction) to Cruseilles (A410/A41 north junction); A41 north from Cruseilles (A410/A41 north junction) to the junction with the A43 at Chambéry; RD1201 between Chambéry and Annecy; RD1203 between Annecy and Bonneville; Grenoble – Chambéry, A41 south between Grenoble and the A43 (Francin interchange) at Montmélian northbound; RD1090 between Montmélian (73) and Pontcharra (38)

Exc. FR1: See weekend driving bans France.

X¹⁰: Public holiday bans France

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1057	Wednesday	12-05-2010	Public holidays	France	22:00	0:00	7,5	Whole network	Exc. FR1
1065	Thursday	13-05-2010	Public holidays	France	0:00	22:00	7,5	Whole network	Exc. FR1

Note: the following dates are listed: (31/12-)1/1, 4/4-5/4, 30/4-1/5, 7/5-8/5, 12/5-13/5, 23/5-24/5, 13/7-14/7, 14/8-15/8, 31/10-1/11, 10/11-11/11, 24/12, 25/12, 31/12 (-1/1).

Exc. FR1: See weekend driving bans France.

Remark:

Transport operators have serious complains about the complexity of the driving restrictions regime and the actual number of driving bans in France.

Germany:

X¹¹: (general) Weekend bans Germany (in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1149	Sunday	23-05-2010	Weekend	Germany	0:00	22:00	7,5	Whole network	Exc.DE1
1215	Sunday	30-05-2010	Weekend	Germany	0:00	22:00	7,5	Whole network	Exc.DE1

Note: only two weekends are listed but the restriction is the same for all weekends throughout the calendar year.

Exc.DE1:

- Combined rail/road goods transport from the shipper to the nearest loading railway station or from the nearest designated unloading railway station to the consignee up to a distance of 200 km (no limitation on distance during the additional summer restrictions); also combined sa/road goods transport between the place of loading or unloading and a port situated within a radius of 150 km maximum (delivery or loading).
- Deliveries of fresh milk and other dairy produce, fresh meat and its fresh derivatives, fresh fish, live fish and their fresh derivatives, perishable foodstuffs (fruit and vegetables).
- Empty vehicles, in connection with the transport operations mentioned under the preceding item.
- Transport operations using vehicles subject to the Federal Law on the obligations of service; the relevant authorisation must be carried on board and produced for inspection on request.
- Also exempted from the prohibition are vehicles belonging to the police and federal border guard, fire brigades and emergency services, the federal armed services and allied troops.
- For operations which are not covered by the above-mentioned exceptions, authorizations must be obtained. These, however, will be issued only in the event of an emergency, when delivery by other means of transport is not possible.

X¹²: Holiday bans Germany

Note: the beginning of the holiday period is Saturday the 3rd of July, the end the 28th of

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1573	Saturday	10-07-2010	Holiday	Germany	7:00	20:00	7,5	L.N.DE1	Exc. DE1
1650	Saturday	17-07-2010	Holiday	Germany	7:00	20:00	7,5	L.N.DE1	Exc. DE1

August. The restriction is in effect on all Saturdays falling in this period.

L.N.DE1:

- A1: from the Koln-west via Wuppertal, the Kamen intersection and Munster to the Cloppenburg junction and from the Oyten junction to the Horst intersection;
- A2: from the Oberhausen intersection to the Bad Oeynhausen intersection;
- A3: from the Oberhausen intersection to the Cologne-east intersection, from the Mönchhof intersection via the Frankfurt intersection to the Nürnberg intersection;
- A4/E40: from the Herleshausen junction to the Nossen intersection;
- A5: from the Darmstadt intersection via Karlsruhe to the Neuenburg intersection;
- A6: from the Schwetzingen-Hockenheim junction to the Nürnbergsouth intersection;
- A7: from the Schleswig/Jagel junction to the Hamburg-Schnelsenorth junction, from the Soltau-East junction to the Göttingennorth junction; from the Schweinfurt/Werneck

- intersection, the Biebelried intersection, the Ulm/Elchingen intersection and the Allgäu intersection to the state border at Füssen;
- A8: from the Karlsruhe intersection to the Munich-west junction and from the Munich-Ramersdorf junction to the Bad Reichenhall junction;
- A9/E51: Berlin ringroad (Leipzig branch road/Potsdam intersection) to the Munich-Schwabing junction;
- A10: Berlin ringroad, with the exception of the section from the Berlin-Spandau junction via the Havelland intersection to the Oranienburg intersection and the section between the Spreeau intersection and the Werder intersection;
- A45: from the Dortmund-south junction via the Westhof intersection and the Gambach intersection to the Seligenstadt intersection;
- A61: from the Meckenheim intersection via the Koblenz intersection to the Hockenheim intersection;
- A81: from the Weinsberg intersection to the Gärtringen junction;
- A92: from the Munich-Feldmoching intersection to the Oberschleissheim junction and from the Neufahrn intersection to the Erding junction;
- A93: from the Inntal intersection to the Reischenhart junction;
- A99: from the Munich-south-west intersection via the intersections at Munich-west, Munich-Allach, Munich Feldmoching, Munichnorth, Munich-east, Munich-south and Munich/Eschenried;
- A215: from the Bordesholm intersection to the Blumenthal junction;
- A831: from the Stuttgart-Vaihingen junction to the Stuttgart motorway intersection;
- A980: from the Allgäu intersection to the Waltenhofen junction;
- A995: from the Sauerlach junction to the Munich-south intersection;
- B31: from the Stockach-east junction of the A98 to the Sigmarszell junction of the A96;
- B96/E251: from Neubrandenburg ringroad to Berlin.

Exc.DE1: see weekend bans

X¹³: Public holiday bans Germany

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1066	Thursday	13-05-2010	Public holidays	Germany	0:00	22:00	7,5	Whole network	None
1169	Monday	24-05-2010	Public holidays	Germany	0:00	22:00	7,5	Whole network	None

Note: the following dates are listed: 1/1, 2/4, 5/4, 1/5, 13/5, 24/5, 3/6, 3/10, 31/10, 1/11, 25/12, 26/12.

Greece:

X¹⁴ (general) Weekend bans Greece (in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1150	Sunday	23-05-2010	Weekend	Greece	15:00	21:00	1,5	L.N.GR2	Exc.GR1
1216	Sunday	30-05-2010	Weekend	Greece	15:00	21:00	1,5	L.N.GR2	Exc.GR1

Note: only two weekends are listed but the restriction is the same for all weekends throughout the calendar year.

L.N.GR2:

- Patras – Corinth – Athens motorway, in the direction of Athens, between Rio and Elefsina toll;
- Thessaloniki – Athens motorway, in the direction of Athens, between the Skotina region (km 410) and Larissa (km 365+400) between the junctions of Raches Fthiotidos and Lamia and between the junctions of Bralos and Agios Stefanos (Kryoneri);
- Kavala – Thessaloniki motorway, in the direction of Thessaloniki, between the bridge over the River Strimonas and the junction of Rentina;
- N.Moudania – Thessaloniki motorway, in the direction of Thessaloniki, between km 34 and the bridge at Thermi.

Exc.GR1:

Vehicles transporting fresh milk, fresh fish, fresh meat or livestock as well as vehicles carrying fresh fruit and vegetables.

X¹⁵: Holiday bans Greece

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1637	Friday	16-07-2010	Holiday	Greece	16:00	21:00	1,5	L.N.GR1	Exc.GR1
1709	Friday	23-07-2010	Holiday	Greece	16:00	21:00	1,5	L.N.GR1	Exc.GR1

Note: the beginning of the holiday period is Saturday the 3rd of July, the end the 28th of August. The restriction is in effect on all Saturdays falling in this period.

L.N.GR1:

- Athens – Corinth – Patra motorway, in the direction of Patra, between Elefsina toll and Rio toll;
- Athens – Lamia – Thessaloniki motorway, in the direction of Thessaloniki, between the junctions of Agios Stefanos (Kryoneri) and Bralos, between the junctions of Lamia and Raches Fthiotidos and from Larissa(km 365+400) to the region of Skotina (km 410);
- Thessaloniki – Kavala motorway, in the direction of Kavala, between the junction of Modi and the bridge over the River Strimonas;
- Thessaloniki – N.Moudania motorway, in the direction of N.Moudania, between the bridge at Thermi and km 34;
- Schimatari – Chalkida motorway, in the direction of Chalkida, from the intersection with the Athens-Thessaloniki motorway to the Chalkida bridge (km 12+300).

Exc.GR1:

Vehicles transporting fresh milk, fresh fish, fresh meat or livestock as well as vehicles carrying fresh fruit and vegetables.

X¹⁶: Public holiday bans Greece

NR	Day	Date	Cat.	Country	Start ¹	End	GVW	Where	Exceptions
692	Friday	02-04-2010	Public holidays	Greece	6:00	16:00	1,5	L.N.GR1	Exc.GR1
743	Monday	05-04-2010	Public holidays	Greece	15:00	22:00	1,5	L.N.GR2	Exc.GR1

Note: the following dates are listed: 1/1, 2/4, 5/4, 1/5, 13/5, 24/5, 3/6, 3/10, 31/10, 1/11, 25/12, 26/12.

- 1) The time window of this type of restrictions vary considerably: 6.00-16.00 hours; 8.00-13.00 hours; 15.00-21.00/22.00 hours and 16.00-21.00/22.00/23.00 hours.

L.N.GR1: see Holiday restrictions.

L.N.GR2: see weekend bans.

Exc.GR1:

Vehicles transporting fresh milk, fresh fish, fresh meat or livestock as well as vehicles carrying fresh fruit and vegetables.

Hungary:

X¹⁷ (general) Weekend bans Hungary
(in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
644	Saturday	27-03-2010	Weekend	Hungary	22:00	0:00	7,5	Whole network	Exc.HU1
656	Sunday	28-03-2010	Weekend	Hungary	0:00	22:00	7,5	Whole network	Exc.HU1

Note: only one weekend is listed but the restriction is the same for all weekends throughout the calendar year.

Exc.HU1:

- Vehicles operated by the armed forces, police, national security services, prison authorities, fire brigade, civil defence, customs authorities, National Transport Authority, emergency vehicles;
- in the case of combined transport, according to the agreement between the European Community and the Republic of Hungary on the conditions of road transport and the promotion of combined transport - vehicles travelling between the combined transport terminal and the place of loading or unloading, or - vehicles travelling between the combined transport terminal nearest to the border crossing point and the border crossing point;
- vehicles used for prevention or assistance in cases of disaster;
- vehicles used in cases of accident or breakdown;
- humanitarian consignments (with the appropriate documentation);
- transport of fresh flowers or plants to the exclusion of all else;
- postal services, newspapers;
- vehicles involved in community work (including town/village cleaning services, waste removal, public utilities repair services);
- vehicles of EURO 3 standard or higher transporting liquid gas;
- vehicles of EURO 3 standard or higher transporting liquid gas;
- vehicles used in the construction, maintenance, repair or cleaning of roads, railways and public utilities;
- vehicles used for the transport of harvested crops or fodder or for the relocation of agricultural machines or slow vehicles;

- vehicles transporting livestock, fresh milk, fresh dairy produce, fresh and deep-frozen meat and meat products, vegetables, eggs, fresh bakery products or other perishable foodstuffs, and vehicles travelling empty in connection with such transport;
- vehicles travelling from the Hungarian border to the nearest parking area designated by the transport authorities for this purpose;
- during the summer driving restrictions, vehicles travelling from the border to their premises in Hungary or to the first unloading place;
- vehicles used for the transport of equipment or animals necessary for cultural, business or sports events (including transport in connection with radio, television or cinema recordings);
- removals of private individuals;
- vehicles involved in the transport to and from railway stations, River ports or airports (between the premises of the consignor/consignee and the nearest such station, port or airport) of goods arriving or forwarded during the period affected by the prohibition;
- tractor vehicle of EURO 3 standard or higher, with a MPW not exceeding 7.5t, travelling without its semi-trailer. Drivers of goods vehicles, agricultural tractors and their trailers of over 7.5t, which are exempt from the driving restrictions should note, however, that during the driving restrictions (see above) in the summer period (1 July – 31 August) the following routes may not be used by their vehicles:
 - M7 motorway;
 - main road No.2 between Budapest and Parassapuszta;
 - trunk road 2A;
 - main road No.6 between Dunaujvaros and Budapest;
 - main road No.7;
 - main road No.10 between Dorog and Budapest;
 - main road No.11 between Esztergom and Budapest;
 - main road No.12;
 - road No.1201;
 - main road No.51 from its intersection with main road 510 to Dömsöd;
 - main road No.71;
- the following sections of main road No.76:
 - between its junctions with main road No.71 and main road No.7;
 - between Zalaapáti and main road No.71;
- main road No.55 between Alsónyék and Baja;
- main road No.82 between main road No.8 and Veszprémvarsány;
- main road No.84 between Sümeg and main road No.71;
- main road No.33 between Dormánd and Debrecen;
- main road No.86 between Janossomorja and Nemesböd and between Körmend and Zalabaksa;
- main road No.37 between Miskolc and Satoraljaujhely;
- main road No.38 from its intersection with main road No.37 to Rakamaz.

X¹⁸: Public holiday bans Hungary

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
2547	Friday	22-10-2010	Public holidays	Hungary	22:00	0:00	7,5	Whole network	Exc.HU1
2555	Saturday	23-10-2010	Public holidays	Hungary	0:00	22:00	7,5	Whole network	Exc.HU1

Note: the following dates are listed: 1/1, 14/3-15/3, 4/4-5/4, 30/4-1/5, 22/5-23/5-24/5, 19/8-20/8, 22/10-23/10, 31/10-1/11, 24/12-25/12-26/12.

Exc.HU1: see weekend bans

Italy:

X¹⁹ (general) Weekend bans Italy (in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
657	Sunday	28-03-2010	Weekend	Italy	8:00	22:00	7,5	Whole network	Exc.IT1
724	Sunday	04-04-2010	Weekend	Italy	8:00	22:00	7,5	Whole network	Exc.IT1

Note: only two weekends are listed but the restriction is the same for all weekends throughout the calendar year.

Exc.IT1:

- Public service vehicles used in cases of emergency or vehicles transporting material needed for emergency use (fire brigade, civil protection etc.);
- Military, Italian Red Cross and police vehicles;
- Vehicles belonging to companies owning roads or having concessions thereon and having urgent reasons for such transport;
- Municipal utility vehicles bearing the words "Municipal Highways Department";
- Vehicles of the Ministry of Post and Telecommunications, bearing the sign "PT" or "Poste Italiane";
- Radio/television vehicles used for urgent services;
- Vehicles transporting fuel for distribution and consumption;
- Vehicles transporting animals for authorised competitions which will take place within the next 48 hours or which took place within the previous 48 hours;
- Vehicles transporting foodstuffs for the supply of aircraft, or those transporting engines and spare parts for aircraft;
- Vehicles transporting foodstuffs for the supply of the merchant navy, and which are covered by the appropriate documentation;
- Vehicles transporting only newspapers and periodicals;
- Vehicles transporting only products for medical use;
- Vehicles transporting only milk (with the exception of long conservation milk). These vehicles must be equipped with green panels 50cm wide and 40cm high, with a small letter "d" printed in black and measuring 20cm in height, affixed in a visible manner on both sides and at the rear;
- Agricultural vehicles used for goods transport, travelling on roads which are not part of the national road network;
- Tankers transporting water for domestic use;
- Vehicles used to clean septic tanks and drains;
- Vehicles transporting perishable foodstuffs under the ATP regime;
- Vehicles transporting perishable goods such as fresh fruit and vegetables, fresh meat and fish, cut flowers, live animals destined for slaughter or arriving from abroad, as

well as sub-products following the slaughter of animals, chickens for rearing, fresh dairy produce, fresh milk derivatives and semen. These vehicles must be equipped with green panels 50cm wide and 40cm high, with a small letter "d" printed in black and measuring 20cm in height, affixed in a visible manner on both sides and at the rear;

- Vehicles returning to the company headquarters provided they are at a distance of no more than 50 km from the headquarters when the driving ban begins and that they do not travel on the motorway network;
- The following vehicles are also excluded provided they have an authorisation delivered by the Prefect:
 - Vehicles transporting goods which, due to their nature or to climatic or seasonal factors, are susceptible to rapid deterioration and must be transported rapidly from the place of production to the place of storage or sale, and vehicles used to transport animal feedstuff;
 - Vehicles transporting goods in cases of absolute necessity or emergency in relation to round-the-clock work;
 - Agricultural vehicles used for goods transport, travelling on the national road network.

The first two categories of vehicle must be equipped with green panels 50cm wide and 40cm high, with a small letter "a" printed in black and measuring 20cm in height, affixed in a visible manner on both sides and at the rear.

Prefects may also deliver a temporary authorisation, valid not more than four months, to vehicles supplying fairs, markets or cultural events.

X²⁰: Holiday bans Italy

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1784	Friday	30-07-2010	Holiday	Italy	16:00	0:00	7,5	Whole network	Exc.IT1
1800	Saturday	31-07-2010	Holiday	Italy	7:00	0:00	7,5	Whole network	Exc.IT1

Note: the beginning of the holiday period is Saturday the 26th of June, the end the 28th of August. The restriction is in effect on all Saturdays falling in this period. The restriction on Friday is in effect on the 30th of July and the 6th and 13th of August.

Exc.IT1: see weekend bans

X²¹: Public holiday bans Italy

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
953	Saturday	01-05-2010	Public holidays	Italy	8:00	22:00	7,5	Whole network	Exc.IT1
1137	Saturday	22-05-2010	Public holidays	Italy	16:00	22:00	7,5	Whole network	Exc.IT1

Note: the following dates are listed (begin hour: end hour): 6/1(6:22), 2/4(16:22), 3/4(8:22), 5/4(8:22), 6/4(8:14), 24/4(16:22), 25/4 (8:2), 30/4 (16:22), 1/5(8:22), 22/5(16:22), 2/6(7,24), 30/10(16:22), 4/12(8:2), 8/12(8:2), 24/12(14:22), 25/15(8:22), 26/12(8:22).

Exc.IT1: see weekend bans

Luxembourg:

X²² (general) Weekend bans Luxembourg (in effect: all weekends throughout the year)

Note: only one weekend is listed but the restriction is the same for all weekends

NR	Day	Date	Cat.	Country	Start ¹⁾	End	GVW	Where	Exceptions
2947	Saturday	11-12-2010	Weekend	Luxembourg	21:30/23:30	0:00	7,5	Whole network	Exc.LU1
2960	Sunday	12-12-2010	Weekend	Luxembourg	0:00	21:45	7,5	Whole network	Exc.LU1

throughout the calendar year.

- 1) The time window starts at 21:30 hours for transports from BE/DE to FR and at 23:30 hours for transports from BE/FR to DE.

Exc.LU1:

- Vehicles transporting livestock, animal-based perishable goods irrespective of their state (fresh, frozen, deep-frozen or salted, smoked, dried or sterilised), fresh or untreated vegetable-based perishable goods (fruit and vegetables), cut flowers or potted plants and flowers;
- Empty vehicles making a trip in relation with the transport operations referred to above, on condition that the vehicles are heading for Germany;
- Vehicles which, during the harvest period, are engaged in the collection and transport of agricultural produce from its place of harvest to its place of storage, packing, processing or transformation;
- Vehicles carrying loads which are indispensable for the installation of duly authorised economic, sports, cultural, educational or political events;
- Vehicles carrying only newspapers;
- Vehicles carrying out office or factory removals;
- Vehicles belonging to tradesmen and which are used for the sale of their products at fairs or markets;
- Vehicles involved in a combined rail-road transport operation between the place of loading and the station of transfer, or between the station of transfer and the destination of the goods, on condition that the distance covered does not exceed 200km and that the transport takes place in the direction of Germany;
- Vehicles for emergency use by the police, army, customs, civil defence and fire brigade as well as those used to transport vehicles which have broken down or been involved in an accident;
- Vehicles being driven under cover of an exceptional authorisation from the Minister of Transport and which exceed the maximum statutory weight as specified above, in particular for transport operations intended to allow the non-stop operation of factories, to prevent any breakdown in supplies or to contribute to the execution of public services in response to immediate local needs; the Ministerial authorisation must be shown on demand to officers responsible for controlling road traffic.

X²³: Public holiday bans Luxembourg

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1058	Wednesday	12-05-2010	Public holidays	Luxembourg	21:30/23:30	0:00	7,5	Whole network	Exc.LU1
1067	Thursday	13-05-2010	Public holidays	Luxembourg	0:00	21:45	7,5	Whole network	Exc.LU1

Note: the following dates are listed: (31/12-)1/1, 4/4-5/4, 30/4-1/5, 12/5-13/5, 23/5-24/5, 14/8-15/8, 31/10-1/11.

Exc.LU1: see weekend bans

Poland:X²⁴: Public holiday bans Poland

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
2630	Sunday	31-10-2010	Public holidays	Poland	18:00	22:00	12	Whole network	Exc.PL1
2645	Monday	01-11-2010	Public holidays	Poland	8:00	22:00	12	Whole network	Exc.PL1

Note: the following dates are listed: (31/12-)1/1, 4/4-5/4, 30/4-1/5, 12/5-13/5, 23/5-24/5, 14/8-15/8, 31/10-1/11.

Exc.PL1:

- Vehicles belonging to the police, road transport inspectorate, border guard, customs, Polish armed forces, government protection bureau, technical emergency services, fire brigade, chemical emergency service and radiological and contamination protection services;
- Breakdown vehicles;
- Vehicles used in rescue operations;
- Emergency vehicles used in cases of natural disaster;
- Vehicles used for humanitarian aid;
- Vehicles used in the construction or maintenance of roads and bridges;
- Vehicles carrying livestock;
- Vehicles used for the collection of fresh milk, corn or livestock;
- Vehicles transporting liquid fuel, oil products, lubricants, spare parts or fresh water for ships;
- Transport of transmission equipment for radio or TV stations;
- Transport of equipment intended for mass events;
- Vehicles transporting newspapers which constitute a considerable volume of the total cargo or of the available loading space;
- Vehicles used for the carriage of drugs or medicines;
- Vehicles used for the carriage of mail which constitutes a considerable volume of the total cargo or of the available loading space;
- Vehicles whose operation is strictly connected with the necessary maintenance of the production cycle or with providing services to a company working around the clock;
- vehicles transporting dangerous goods, as covered by separate regulations, in quantities for which the orange plate is required;
- Vehicles carrying perishable goods or foodstuffs* which constitute a considerable volume of the total cargo or of the available loading space;
- Vehicles used for the carriage of concrete or equipment for pumping concrete;
- Vehicles used for transporting municipal waste;
- Vehicles engaged in the production cycle up to a distance of 50km from their home base;
- Vehicles used in combined transport;
- Slow-moving agricultural vehicles and tractors;
- Vehicles returning from abroad to complete a road transport operation or travelling to the consignee who has his registered office in Poland, provided that the driver has a valid annual toll card for driving on domestic roads;
- Vehicles which entered Poland before the date or time of the restriction and which may travel up to 50 km from the border crossing, and vehicles in the border zone waiting to exit Poland.

NB: The exceptions mentioned under points 6 to 21 apply also to empty vehicles travelling to load cargo or on their return journey after unloading on Polish territory.

* List of perishable foodstuffs: meat and edible offal; fish, shellfish, molluscs and other aquatic invertebrates; dairy products, in particular yoghurts, kefir, sour cream, milk, cheese, butter and ice-cream; birds' eggs and egg pastes; cut flowers and house-plants; fresh and frozen vegetables, fruit and mushrooms; cereals and agricultural produce for the production of food, fodder and vegetable fats; ground cereals, in particular flour, oats, semolina and corn granules; fat and oil of animal or vegetable origin; food preserves, in particular of meat, poultry, fish, vegetables and fruit; sweets and confectionery; preserves of cereals, flour, starch, milk powder and bakery products; soft drinks; remains and waste from the food industry, ready-made animal feedstuff; sugar beet; potatoes; fresh yeast; cultivation medium for mushrooms.

Romania:

X²⁵: Holiday bans Romania

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1424	Friday	25-06-2010	Holiday	Romania	12:00	0:00	7,5	L.N.RO3	Exc.RO2
1436	Saturday	26-06-2010	Holiday	Romania	6:00	22:00	7,5	L.N.RO2	Exc.RO2

Note: the beginning of the holiday period is the 18th of June, the end the 12th of September.

L.N.RO2:

- Cluj Napoca (exit) - Oradea (entry);
- Sabaoani (junction with DN28) - Suceava - Siret (entry);
- Agigea (junction with DN38) - Mangalia (entry);
- Pitesti (exit) - Rm. Valcea - Vestem (junction with DN1);
- Ilia (junction with DN68A) - Arad (entry).

L.N.RO3:

- Bucharest (exit) - Fundulea - Lehliu - Draja - Fetesti - Cernavoda (junction with DN22C);
- Cernavoda - Medgidia - Basarabi (junction with DN3);
- Basarabi – Constanta.

Exc.RO2:

- Vehicles of the civil protection service, funeral transport, first-aid and humanitarian transport, mail transport, fuel distribution, breakdown vehicles, vehicles belonging to sanitation services, transport of livestock, transport of perishable goods (including fresh bread) and goods under controlled temperature provided the goods take up at least half of the loading capacity of the vehicle.

X²⁶: Public holiday bans Romania

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1158	Sunday	23-05-2010	Public holidays	Romania	0:00	22:00	7,5	L.N.1/2/3	Exc.RO2
1174	Monday	24-05-2010	Public holidays	Romania	0:00	22:00	7,5	L.N.1/2/3	Exc.RO2

Note: the following dates are listed: 1/1, 2/1, 4/4, 5/4, 1/5, 23/5, 24/5, 15/8, 25/12, 26/12.

L.N.RO1:

- DN1 (E60): Bucharest ringroad - Otopeni - Ploiesti (entry) (applies to vehicles of over 3,5 t MPW);
- DN1 (E60): Ploiesti (exit) - Brasov (entry).

L.N.RO2:

- DN1 (E60): Cluj Napoca (exit) - Oradea (entry);
- DN2 (E85): Sabaoani (junction with DN28) - Suceava - Siret (entry);
- DN39 (E87): Agigea (junction with DN38) - Mangalia (entry);
- DN7 (E81): Pitesti (exit) - Rm. Valcea - Vestem (junction with DN1);
- DN7 (E68): Ilia (junction with DN68A) - Arad (entry).

L.N.RO3:

- A2 (E81): Bucharest (exit) - Fundulea - Lehliu - Drajna - Fetesti - Cernavoda (junction with DN22C);
- DN22C (E81): Cernavoda - Medgidia - Basarabi (junction with DN3);
- DN3 (E81): Basarabi – Constanta.

Exc.RO2:

- Vehicles of the civil protection service, funeral transport, first-aid and humanitarian transport, mail transport, fuel distribution, breakdown vehicles, vehicles belonging to sanitation services, transport of livestock, transport of perishable goods (including fresh bread) and goods under controlled temperature provided the goods take up at least half of the loading capacity of the vehicle.

Slovakia:

X²⁷ (general) Weekend bans Slovakia
(in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where ¹⁾	Exceptions
1284	Sunday	06-06-2010	Weekend	Slovakia	0:00	22:00	7,5	Main roads	Exc.SK1
1336	Sunday	13-06-2010	Weekend	Slovakia	0:00	22:00	7,5	Main roads	Exc.SK1

Note: only two weekends are listed but the restriction is the same for all weekends throughout the calendar year.

1) Motorways, trunk roads and main roads

Exc.SK1:

- Coaches, caravans;
- Vehicles of the armed forces, police and the Slovak Security Service;
- Vehicles used for indispensable seasonal agricultural work;
- Vehicles transporting medical instruments, or biological or pharmaceutical products to hospitals or medical institutions, or to ensure the operation of medical equipment in hospitals or medical institutions;
- Vehicles used in combined transport or for loading or unloading ships or trains on the territory of the Slovak Republic;
- Vehicles used for cultural or sporting events, and in particular for the transport of boats, motorcycles, horses, birds etc.;
- Aid vehicles required at scenes of accidents or natural disaster;
- Vehicles used for the supply of petrol stations;
- Vehicles transporting perishable goods or livestock.

X²⁸: Holiday bans Slovakia

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1580	Saturday	10-07-2010	Holiday	Slovakia	7:00	19:00	7,5	Main roads	Exc.SK1
1657	Saturday	17-07-2010	Holiday	Slovakia	7:00	19:00	7,5	Main roads	Exc.SK1

Note: the beginning of the holiday period is the 3rd of July, the end the 28th of August.

Exc.SK1: see weekend bans

X²⁹: Public holiday bans Slovakia

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
696	Friday	02-04-2010	Public holidays	Slovakia	0:00	22:00	7,5	Main roads	Exc.SK1
750	Monday	05-04-2010	Public holidays	Slovakia	0:00	22:00	7,5	Main roads	Exc.SK1

Note: the following dates are listed: 1/1, 6/1, 2/4, 5/4, 1/5, 8/5, 5/7, 29/8, 1/9, 15/9, 1/11, 17/11, 24/12, 25/12, 26/12.

Exc.SK1: see weekend bans

Slovenia:

X²⁷ (general) Weekend bans Slovenia (in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1098	Sunday	16-05-2010	Weekend	Slovenia	0:00	22:00	7,5	L.N.SI1	Exc.SI1
1160	Sunday	23-05-2010	Weekend	Slovenia	0:00	22:00	7,5	L.N.SI1	Exc.SI1

Note: only two weekends are listed but the restriction is the same for all weekends throughout the calendar year.

L.N.SI1:

The list of road sections that belong to the limited network consists of more than 100 road sections.

Exc.SI1:

- The removal or towing of damaged or broken-down vehicles which are obstructing or endangering traffic. In such cases, only a company registered for this type of activity may move the vehicle to the nearest suitable place;
- Humanitarian aid transport;
- Emergency vehicles;
- Transport operations in relation to the prevention or elimination of a direct threat to persons or property;
- Transport operations in relation to the prevention or elimination of a major material loss or environmental contamination;
- Vehicles used for urgent road maintenance or winter maintenance (e.g. sanding of roads);
- Transport of mechanical equipment or building materials required for urgent road building or maintenance; the driver must be in possession of the relevant authorisation issued by the Slovenian motorway company (DARS);
- Radio and TV vehicles if the aim of the transport operation is to provide information to the public;
- Delivery of oil derivatives to petrol stations;
- Transport of international peace-keeping forces;
- Transport of national and international mail;
- Vehicles involved in combined transport operations (rail or sea);
 - vehicles travelling to a rail or ferry terminal if there is a possibility that by respecting the driving restrictions the vehicle would not arrive at the terminal in time; the driver must prove this by means of the relevant documentation;

- vehicles travelling from a rail or ferry terminal to the nearest border crossing, if the vehicle can complete the transport operation in the other country; the driver must prove this by means of the relevant documentation;
- Transport of silvicultural or agricultural produce during the harvest season;
- Transport of grain and hops to storage or drying facilities during the harvest season;
- Transport of one-day old chickens;
- Transport of milk;
- The refrigerated transport of perishable goods;
- Transport of fresh flowers;
- Removal of waste;
- Urgent removal of animal carcasses or animal waste subject to the written approval of the veterinary authorities;
- Transport of mobile disinfection units for hospital use.

X³¹: Public holiday bans Slovenia

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1984	Sunday	15-08-2010	Public holidays	Slovenia	8:00	21:00	7,5	L.N.SI1	Exc.SI1
2633	Sunday	31-10-2010	Public holidays	Slovenia	8:00	21:00	7,5	L.N.SI1	Exc.SI1

Note: the following dates are listed: 1/1, 2/1, 8/2, 2/4(14:21), 5/4, 17/4, 1/5, 2/5, 25/6, 15/8, 31/10, 25/12, 26/12.

L.N.SI1

The list of road sections that belong to the limited network consists of more than 100 road sections.

Exc.SI1: see weekend bans

Spain:

X³² (general) Weekend bans Spain
(in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1712	Friday	23-07-2010	Weekend	Spain	14:00	0:00	7,5	L.N.ES23	Exc.ES1
1733	Saturday	24-07-2010	Weekend	Spain	11:00	22:00	7,5	L.N.ES3	Exc.ES2
1734	Saturday	24-07-2010	Weekend	Spain	7:00	19:00	7,5	L.N.ES4	Exc.ES2
1735	Saturday	24-07-2010	Weekend	Spain	0:00	22:00/0:00	7,5	L.N.ES24	Exc.ES1
1753	Sunday	25-07-2010	Weekend	Spain	15:00/17:00	0:00	7,5	L.N.ES1	Exc.ES2
1754	Sunday	25-07-2010	Weekend	Spain	17:00/21:00	23:00/1:00	7,5	L.N.ES2	Exc.ES2
1755	Sunday	25-07-2010	Weekend	Spain	11:00	22:00	7,5	L.N.ES3	Exc.ES2
1756	Sunday	25-07-2010	Weekend	Spain	0:00	22:00	7,5	L.N.ES5	Exc.ES2

Note: only one weekend is listed but the restriction is the same for all weekends throughout the calendar year.

L.N.SI1, etc:

The list of road sections that belong to a certain limited network consists of several hundreds of road sections.

Exc.ES1:

- The transport of liquid gas for domestic use to the distribution point or to the users; the transport of goods for the supply of service stations; the transport of fuel to ports, airports and seasonal bases of fire-fighting aircraft, for the supply of ships or aircraft; the transport of fuel for the supply of rail transport; the transport of heating oil for domestic use; the transport of gas for hospitals or for home care.

Exc.ES2

- Transport of livestock or fresh milk

X³³: Public holiday bans Spain

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
2679	Saturday	06-11-2010	Public holidays	Spain	16:00	22:00	7,5	L.N.ES34	Exc.SI1
2695	Sunday	07-11-2010	Public holidays	Spain	8:00	13:00/16:00	7,5	L.N.ES35	Exc.SI1
2702	Monday	08-11-2010	Public holidays	Spain	15:00	22:00	7,5	L.N.ES36	Exc.SI1
2708	Tuesday	09-11-2010	Public holidays	Spain	11:00/16:00	22:00/0:00	7,5	L.N.ES37	Exc.SI1

Note: the following dates are listed: 1/1, 2/1, 8/2, 2/4(14:21), 5/4, 17/4, 1/5, 2/5, 25/6, 15/8, 31/10, 25/12, 26/12.

L.N.ES34/35/36/37

The list of road sections that belong to these limited networks consists of more than 100 road sections.

Exc.ES1:

- The transport of liquid gas for domestic use to the distribution point or to the users; the transport of goods for the supply of service stations; the transport of fuel to ports, airports and seasonal bases of fire-fighting aircraft, for the supply of ships or aircraft; the transport of fuel for the supply of rail transport; the transport of heating oil for domestic use; the transport of gas for hospitals or for home care.

Remark:

Transport operators have serious complains about the complexity of the driving restrictions regime and the actual number of driving bans in Spain.

Switzerland:

X³⁴: (general) Night bans Switzerland (in effect: all calendar days of the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
2970	Monday	13-12-2010	Night	Switzerland	22:00	0:00	3,5	whole network	None
2971	Monday	13-12-2010	Night	Switzerland	0:00	5:00	3,5	whole network	None

Note: only one day is listed but the restriction is the same throughout the calendar year.

X³⁵: (general) Weekend bans Switzerland
(in effect: all weekends throughout the year)

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
2524	Sunday	17-10-2010	Weekend	Switzerland	0:00	24:00	3,5	whole network	None
2576	Sunday	24-10-2010	Weekend	Switzerland	0:00	24:00	3,5	whole network	None

Note: only two weekends are listed but the restriction is the same for all weekends throughout the calendar year.

X³⁶: Public holiday bans Switzerland

NR	Day	Date	Cat.	Country	Start	End	GVW	Where	Exceptions
1071	Thursday	13-05-2010	Public holidays	Switzerland	0:00	0:00	3,5	L.N.CH1	Exc.CH1
1177	Monday	24-05-2010	Public holidays	Switzerland	0:00	0:00	3,5	L.N.CH1	Exc.CH1

Note: the following dates are listed: 1/1, 2/4, 5/4, 13/5, 24/5, 1/8, 25/12, 26/12.

L.N.CH1:

If any of the listed public holiday dates is in fact not a holiday in one of the cantons or part of a canton, the restriction in that canton is not in effect.

Exc.CH1:

The cantonal prohibitions for public holidays do not apply for traffic in transit.

3.4 Inventory of non-fixed-date driving restrictions

In table 3.4 an overview has been presented of the main non-fixed-date driving restrictions.

Table 3.4 Overview of main types of non-fixed-date driving restrictions

Country	Commodity groups ¹⁾	Extreme weather ²⁾	Congestion related ³⁾
Austria	N ¹		
Belgium			
Bulgaria		N ²	
Cyprus			
Czech republic			
Denmark			
Estonia			
Finland			
France	N ³	N ⁴	N ⁵
Germany	N ⁶		
Greece		N ⁷	
Hungary	N ⁸		
Ireland			
Italy	N ⁹		
Latvia			
Lithuania	N ¹⁰		
Luxembourg			
Malta			
Netherlands		N ¹¹	
Norway			
Poland		N ¹²	
Portugal	N ¹³		
Romania			
Slovakia			
Slovenia	N ¹⁴	N ¹⁵	N ¹⁶
Spain	N ¹⁷		
Sweden			
Switzerland			
United Kingdom			
Total	9	6	2

1) Except only for Austria, the additional restrictions apply for ADR-types of goods

2) Exceptional weather conditions may trigger some additional driving restrictions on sections of the road network.

3) Exceptional heavy traffic may trigger additional driving restrictions.

Source: NEA-restrictions database

In the following overview the next parameters have been listed:

- "Cat.": Fixed date restriction category.
- "Country": The country in which this restriction is in effect.
- "Start": Start hour/minute of the restriction.
- "End": End hour/minute of the restriction.
- "GVW": Weight limit (start limit) of the truck.

- “Where”: The fraction of the (highway) road network for which the restriction is valid.
- “Exc.”: The description of vehicle and/or commodity groups that are exempted of the restriction.

Detailed description per country of the fixed date driving restrictions listed in table 3.4.

B. Non-fixed-date Related Restrictions

Class B1: Commodity group

Driving restrictions in this group relate to the actual commodities that are transported. If a certain shipment contains these commodities a general driving prohibition is in effect.

N¹: Commodity group related driving restrictions in Austria.

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc. ⁴⁾
Commodity	Austria	all	Limited network	Yes

1) Commodities affected:

- Waste products (conform: Directive 2000/532/EC), soil, rock
- Tree trunks, cork
- Powered vehicles
- Steel, tiles (“Fliesen”)

Per 1 July 2010 also:

- Iron and non-iron ores
- Marble
- Travertine

2) Vehicle category: All freight vehicles

3) Road section: A12 between km 6,35 and km 72,00 (as per 1-1-2011: km 90,00)

4) Exempted are:

- Freight vehicles with loading and/or unloading location in the area between km 6,35 and km 72,00
- If the shipment is part of an intermodal transport assignment.

N³: Commodity group related driving restrictions in France.

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc.
Commodity	France	all	Limited network	No

1) Commodities affected:

- Dangerous goods.

2) Vehicle category:

- All freight vehicles transporting dangerous goods.

3) Road sections (sometimes only in combination with wintery driving conditions):

- Col de Montgenèvre;
- Col du Lautaret;
- Col de Larche;
- Boulevard Périphérique;
- A14;
- Boulevard des Maréchaux;
- Road sections with tunnels.

N⁶: Commodity group related driving restrictions in Germany.

Cat.¹⁾	Country	VC²⁾	Road section³⁾	Exc.
Commodity	Germany	all	Whole network	No

- 1) Commodities affected:
 - Dangerous goods.
- 2) Vehicle category:
 - All freight vehicles transporting dangerous goods.
- 3) All road sections and in combination with wintery driving conditions.

N⁸: Commodity group related driving restrictions in Hungary.

Cat.¹⁾	Country	VC²⁾	Road section³⁾	Exc.
Commodity	Hungary	all	Whole network	No

- 1) Commodities affected:
 - Certain dangerous goods (subset of ADR-class 1).
- 2) Vehicle category:
 - All freight vehicles transporting certain dangerous goods.
- 3) Transport permit valid for a certain route only.

N⁹: Commodity group related driving restrictions in Italy.

Cat.¹⁾	Country	VC²⁾	Road section³⁾	Exc.
Commodity	Hungary	all	Whole network	No

- 1) Commodities affected:
 - Certain dangerous goods (ADR-class 1).
- 2) Vehicle category:
 - All freight vehicles transporting certain dangerous goods.
- 3) Additional weekend driving ban in the period the 1st of June until the 19th of September from Friday 18.00 hours until Sunday 24.00 hours.
 A total driving ban is in effect for:
 - (road sections leading to) Mont Blanc tunnel (ADR class "E"-tunnel);
 - Fréjus tunnel ("C"-tunnel)
 Note: Additional permits are needed for using the Grand Saint-Bernard-tunnel.

N¹⁰: Commodity group related driving restrictions in Lithuania.

Cat.¹⁾	Country	VC²⁾	Road section³⁾	Exc.
Commodity	Hungary	all	Whole network	No

- 1) Commodities affected:
 - Certain dangerous goods (ADR-class 1 and 7).
- 2) Vehicle category:
 - All freight vehicles transporting certain dangerous goods.
- 3) A special permit is required.

N¹³: Commodity group related driving restrictions in Portugal.

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc. ⁴⁾
Commodity	Portugal	all	Limited Network	Yes

- 1) Commodities affected:
 - All ADR-classes of dangerous goods.
- 2) Vehicle category:
 - All freight vehicles of more 3,5 tons GVW.
- 3) Total driving ban on all Fridays, Sundays and public holidays and from 18.00 to 21.00 on the day before a public holiday:
 - EN6: Lisbon- Vascais;
 - EN10: Infantado- Via Franca de Xira;
 - EN14: Porto- Braga;
 - EN15: Porto- Campo (A4);
 - EN105: Porto- Alfena;
 - IC1: Coimbrões- Miramar;
 - EN209: Porto, Gondomar- Valongo;
 - IC2: Alenquer- Carvalhos;
 - EN1: Cavalhos- Vila Nova de Gaia;
 - EN13: Porto- Viana do Castelo;
 - EN101: Braga- Vila Verde;
 - EN125: Lagos- São João da Venda;
 - IC4: São João da Venda- Faro;
 - EN125: Faro- Olhão;
 - EN125: Olhão- Pinheira.

A driving ban also exists on the roads to and from Lisbon and Porto in July and Augusts on the Mondays from 7.00 to 10.00 hours.
- 4) The following transport of dangerous goods are exempted of the driving restriction:
 - The transport of dangerous goods for hospitals, the police or the army.
 - The transport of fuel to airports and (sea) harbours.
 - The transport of dangerous loaded or unloaded from a sea-going vessel.

Further exemptions (after acquiring a permit) are granted if:

 - The address of loading or unloading is only to be reached by crossing the restricted road section.
 - The cargo is part of a 24-hours ongoing production process.

N¹⁴: Commodity group related driving restrictions in Slovenia.

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc.
Commodity	Slovenia	all	Whole network	No

- 1) Commodities affected:
 - All ADR-classes of dangerous goods.
 - Additional permits are needed for ADR-class 1 and 7.
- 2) Additional requirements:
 - The maximum driving speed: minus 20%.
 - Driver's age: 21 or higher.
 - Insurance policy must be on hand.
- 3) Additional mandatory requirements for passing tunnels exist.
No transport of dangerous goods is permitted in case of extreme wintery conditions.

N¹⁷: Commodity group related driving restrictions in Spain.

Cat. ¹⁾	Country	VC	Road section ²⁾	Exc.
Commodity	Slovenia	all	Whole network	No

- 1) Commodities affected:
 - All ADR-classes of dangerous goods.
 - Additional permits are needed for ADR-class 1.
- 2) Total driving ban for all dangerous goods on:
 - Sundays and public holidays between 8.00 and 24.00 hours;
 - The day before a public holiday (except for Saturdays) from 13.00 to 24.00 hours;
 - In Bask region: a certain day in July or August (exact details will be communicated later in the year).
 - Special arrangements exists for the use of tunnels.

Class B2: Extreme Weather

Extreme weather conditions (high temperatures, strong melting) could have devastating effects on the road surface. Some countries therefore have introduced driving restrictions for such weather conditions. Although publicly announced before the actual restriction is in force, the time between the enforcement and the announcement can be short and is sometimes no more than two working days.

N²: Extreme weather driving restrictions in Bulgaria.

Cat. ¹⁾	Country	VC ²⁾	Road section	Exc.
Extreme weather	Bulgaria	20 ton	Whole network	No

- 1) Temperature 35°C or more. The exact details are communicated two days before the ban gets in effect.
- 2) All freight vehicles with a total GVW of 20 tons or more.

N⁴: Extreme weather driving restrictions in France.

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc.
Extreme weather	France	7,5/12 ton	Limited network	No

- 1) “Barrières de dégel”. In the winter during periods of defrost.
- 2) All freight vehicles with a total GVW of more than 7,5 or 12 tons (depending on the legislative authority).
- 3) The actual specifics (such as exact road section and duration of the restriction) of these type of bans can mutate day by day and are mainly communicated by departmental and/or local authorities by means of traffic signs.

N⁷: Extreme weather driving restrictions in Greece.

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc.
Extreme weather	Greece	1,5 ton	Limited network	No

- 1) Smog-warning related driving restriction.
- 2) All freight vehicles with a total GVW of more than 1,5.
- 3) The region of Athens.

N¹¹: Extreme weather driving restrictions in The Netherlands.

Cat. ¹⁾	Country	VC ²⁾	Road section	Exc.
Extreme weather	Netherlands	3,5 ton	Whole network	No

- 1) Poor visibility (fog) and/or icy road conditions.
- 2) If the visibility is less than 200 meters the following transports are banned:
 - All freight vehicles equipped with tanks for dangerous goods with a capacity of 3000 litres or more;
 - All freight vehicles transporting high-explosives with a volume of 20 kilograms or more.
 If the visibility is less than 50 meters or by icy road conditions and from a certain threshold volume, the transport of dangerous goods is prohibited.

N¹²: Extreme weather driving restrictions in Poland.

Cat. ¹⁾	Country	VC ²⁾	Road section ³⁾	Exc.
Extreme weather	Poland	3,5 ton	Whole network	No

- 1) Extreme high temperatures.
- 2) All vehicles with a GVW of 12 tons or more.
- 3) Between 11.00 and 22.00 hours.

N¹⁵: Extreme weather driving restrictions in Slovenia.

Cat. ¹⁾	Country	VC ²⁾	Road section	Exc.
Extreme weather	Slovenia	3,5 ton	Whole network	No

- 1) Bad weather situations.
- 2) All vehicles transporting dangerous goods.

Class B3: Congestion Related

Two European countries maintain driving restrictions during (expected) extreme congested traffic situations mainly related to the start and finish of the holiday season.

N⁵: Congestion related driving restrictions in France.

Cat. ¹⁾	Country	VC	Road section ²⁾	Exc.
Congestion related	France	7,5 ton	Whole network	No

- 1) Vacation season related traffic peak driving restrictions.
- 2) The following months traffic flow related driving bans can be proclaimed by the national; government:
 - In the months February and March in the French Alps;
 - In the months July and August on several Saturdays.

N¹⁶: Congestion related driving restrictions in Slovenia.

Cat. ¹⁾	Country	VC	Road section ²⁾	Exc.
Congestion related	Slovenia	7,5 ton	Whole network	No

- 1) Extreme traffic peaks may cause additional driving restrictions.
- 2) The whole network or sections hereof.

4 Impact Assessment: Methodology

Introduction

The major part of the study consisted of a profound impact assessment of the different types of driving restrictions. In the next sections of this chapter we will explain in more detail the manner in which the impact assessment was performed.

Main transport barriers

A closer look, for instance, at the map of figure 2.2 (see chapter 2) reveals clearly that road freight transport in certain European regions is confronted with many more restrictions than in other regions. In broad lines and according to driving bans, Europe seems to be split in two. The splitting barrier could be defined by the countries along the Alps, the Pyrenees and, to a lesser degree the Balkan mountain ranges, e.g. France, Switzerland, Austria, Hungary and Romania. Three of these countries are listed with a pink or red colour. This means that some kind of driving restriction is in effect on more than 100 calendar days. We therefore decided that the focus of the impact assessment should be put on freight transport transiting these countries.

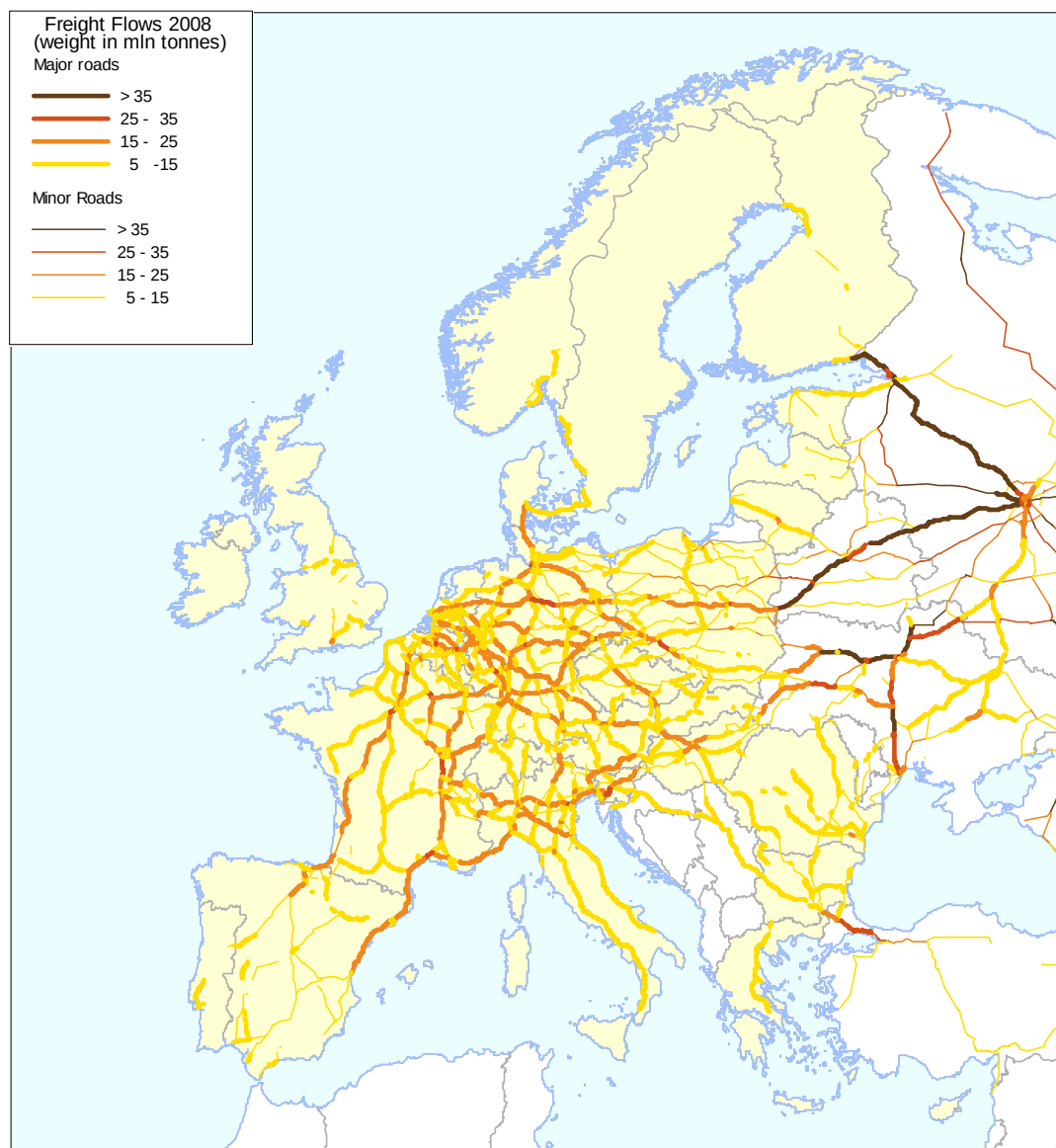
Level of detail

Although an impact assessment could be performed at a global and aggregated level, we decided to perform at least an impact assessment of driving restrictions at a very detailed level. The main advantage hereof is that the figures used to perform the assessment can be much more specific and therefore produce impact figures that are much easier to interpret. After this exercise we used these detailed figures to evaluate the effect of driving restrictions on the European level. However, to be able to perform an assessment on a detailed level, the first step that we had to take is to define this level exactly.

Number of Trips

Freight flows figures are available at a detailed level concerning commodity types and economic regions for the year 2008 (see figure 4.1). These figures were made useable for the assessment of the impact of the driving restrictions. However, as driving restrictions have their main effects on the actual trips made by trucks, a conversion of freight flows into the number of trips was necessary. Commercial road freight transport is governed by economic principles, and a large truck is more price efficient per transport unit than a smaller one, therefore the largest trucks will be operated. In international freight transport the total vehicle weight (GVW) is limited to 40 tonnes, this means that the maximum cargo weight is about 25 tonnes. In long distance transport the average capacity utilisation factor is about 80%. The resulting average cargo weight can therefore be calculated at a level of 20 tonnes. By dividing the freight flows by this volume a good estimate for the actual number of trips that visit a certain region is presented in figure 4.1.

**Figure 4.1 Freight flows assigned to the (major) road network in Europe.
(international freight flows)**



Source: NEA-Worldnet 2008

Impact Assessment

After having listed the regions/corridors with potentially heavy impacts of driving restrictions, the actual impact assessment was performed.

In principle at least the following scenarios were distinguished:

- The basic scenario:
In this scenario only effects of driving bans are taken into account that are in effect throughout the year (e.g. general night driving bans). This scenario forms the basis for the determination of the effects of certain driving restrictions.
- The "weekend ban" scenario:
This scenario determines the effect of a weekend (and its bans).
- The "summer holiday ban" scenario:
Certain countries maintain additional driving bans during summer holiday periods. The effects hereof are determined in this scenario. Two versions were distinguished, namely "with" and "without" a weekend.
- The "Sudden One Day Ban" scenario:
Once every while and for different reasons a one day driving ban can be effectuated. In this scenario the effect hereof is determined.

The first scenario presents the value of the key impact factors (see next section below) on a certain corridor as they actually appear from the freight flow figures and thus with the driving restriction in effect. The next scenarios determine the value of the key factors as if there are certain additional driving restrictions in effect.

Key Impact Factors

The next step was to define more closely and second to perform (cost) calculations. As commercial road freight transport is an activity driven by economic principles, cost price effects of driving restrictions will have substantial effect on, for instance, the actual routing of the trips. Thus, although strict driving bans (with substantial costs increase effects) may have a profound decreasing effect on the regional's number of trips, it is assumed that the initial level of transport demand will remain more or less the same. A sharp drop in number of trips in a certain region will then be compensated by a comparable rise in number of trips in neighbouring regions.

Corridors

Using the figures on the actual level of the freight flows visiting a certain region as a weight factor for the determination of the impact opens the possibility to rank the restrictions. In this way countries, regions or even corridors (with a clear origin and destination) that might experience the heaviest impacts of driving restrictions were defined.

Several corridors on which the impact assessment will be performed, were defined in more detail below:

- Alps Region (see also figure 4.2):
 - 1 The transit trips visiting Switzerland.

As Switzerland is one of the (“red”) countries with the most driving restrictions an impact assessment may provide valuable insight into the effect of these restrictions not only for the region itself but also for neighbouring regions.
 - 2 The France-Italian border crossing area.

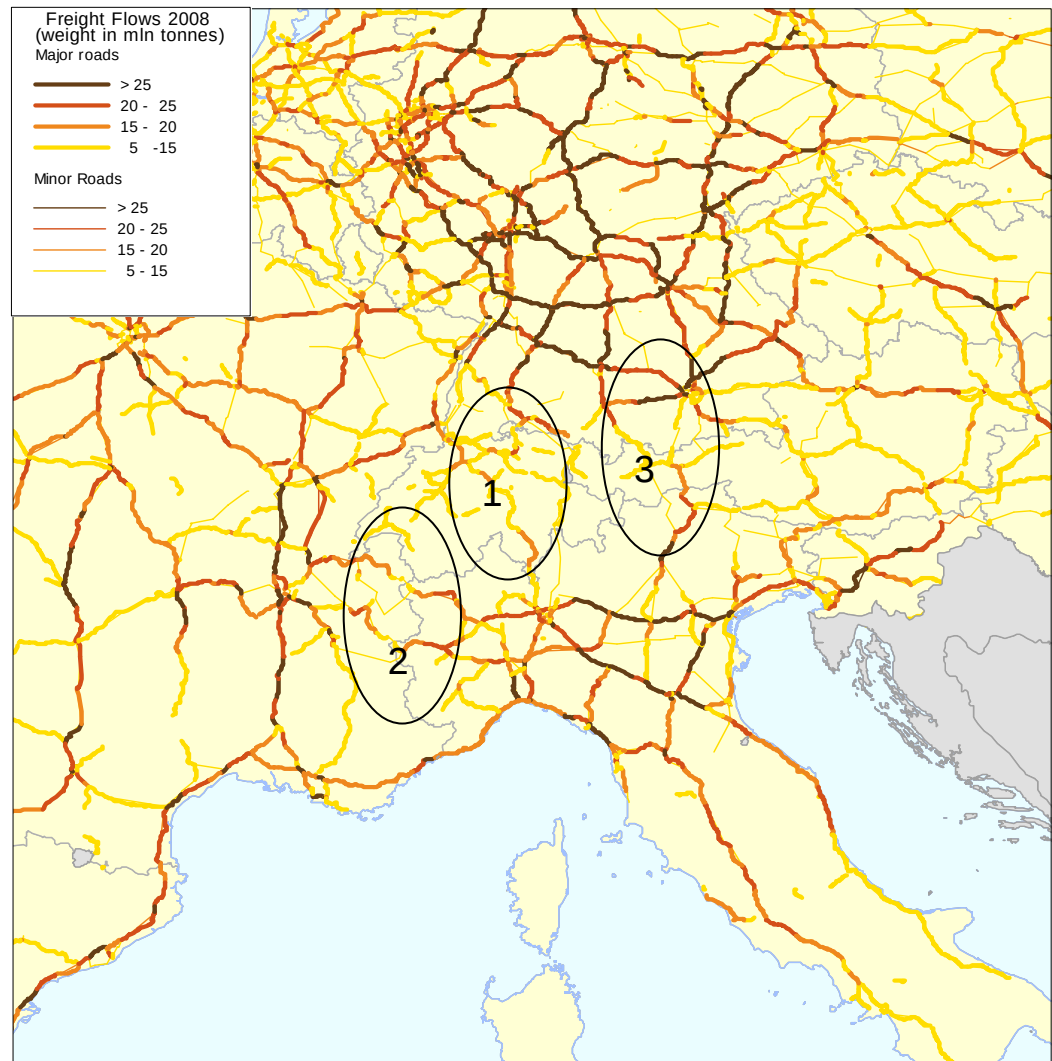
This area is likely to experience many side effects from the driving restrictions in effect in Switzerland as this area provides an alternative route for long distance freight transport between northwest and southeast Europe.
 - 3 The South Germany- Austria border crossing area.

Large transport volumes come down from Germany and have southern and south-eastern European countries as final destination. These large volumes must cross Austria. As there are practically no alternative routes it is essential to evaluate the impact of driving restrictions in this area.
- East-West corridor (see also figure 4.3):
 - 4 The Poland-Germany corridor.

This corridor provides the main route between Western Europe and Russia.
- Pyrenees Region (see also figure 4.4):
 - 5 The southeast Pyrenees' corridor.

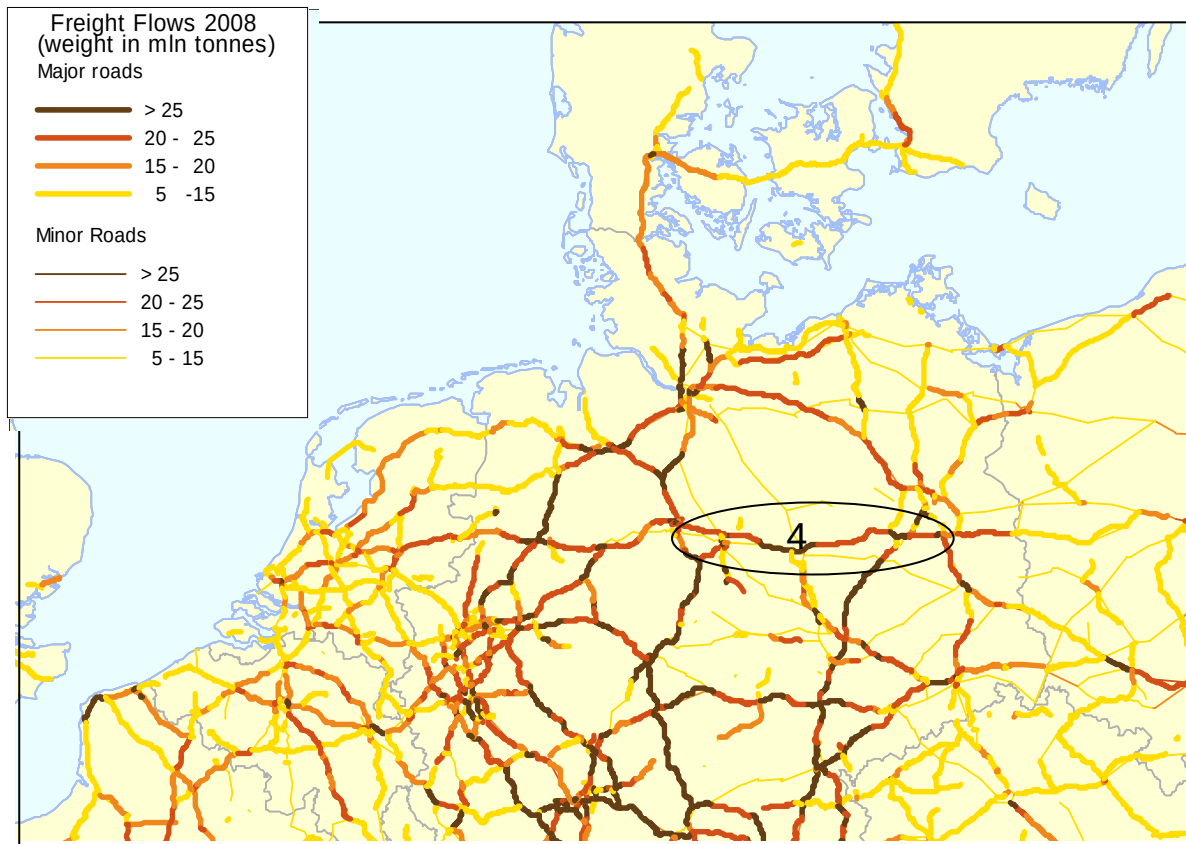
As two main corridors can be defined for crossing the Pyrenees, a mutation of restrictions in the one will have strong side effects on the other.
 - 6 The northwest Pyrenees' corridor.

Figure 4.2 Freight flows assigned to the (major) road network crossing the Alps



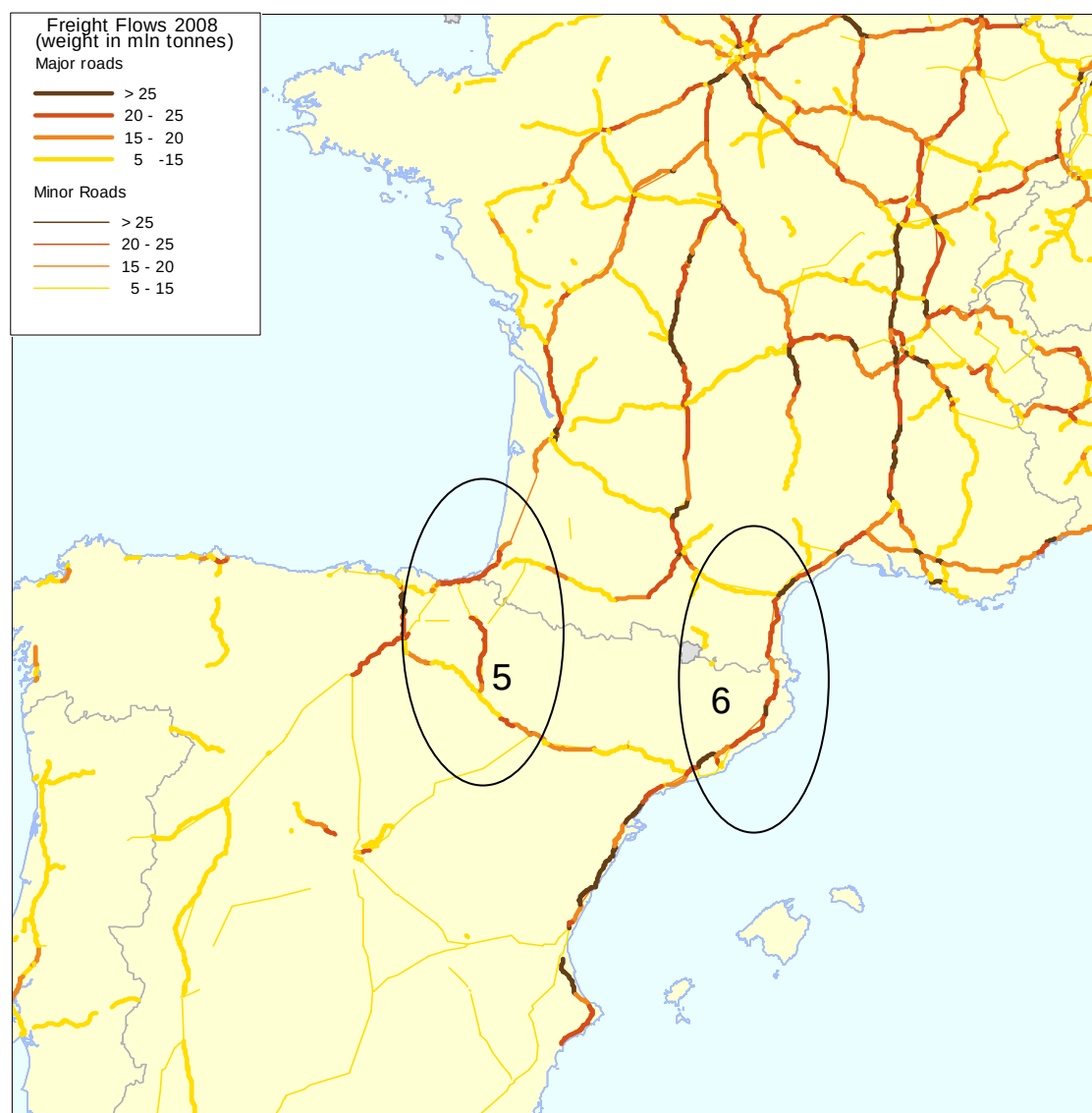
Source: NEA-Worldnet 2008

Figure 4.3 Freight flows assigned to the (major) road network between Western Europe and Russia (international freight flows)



Source: NEA-Worldnet 2008

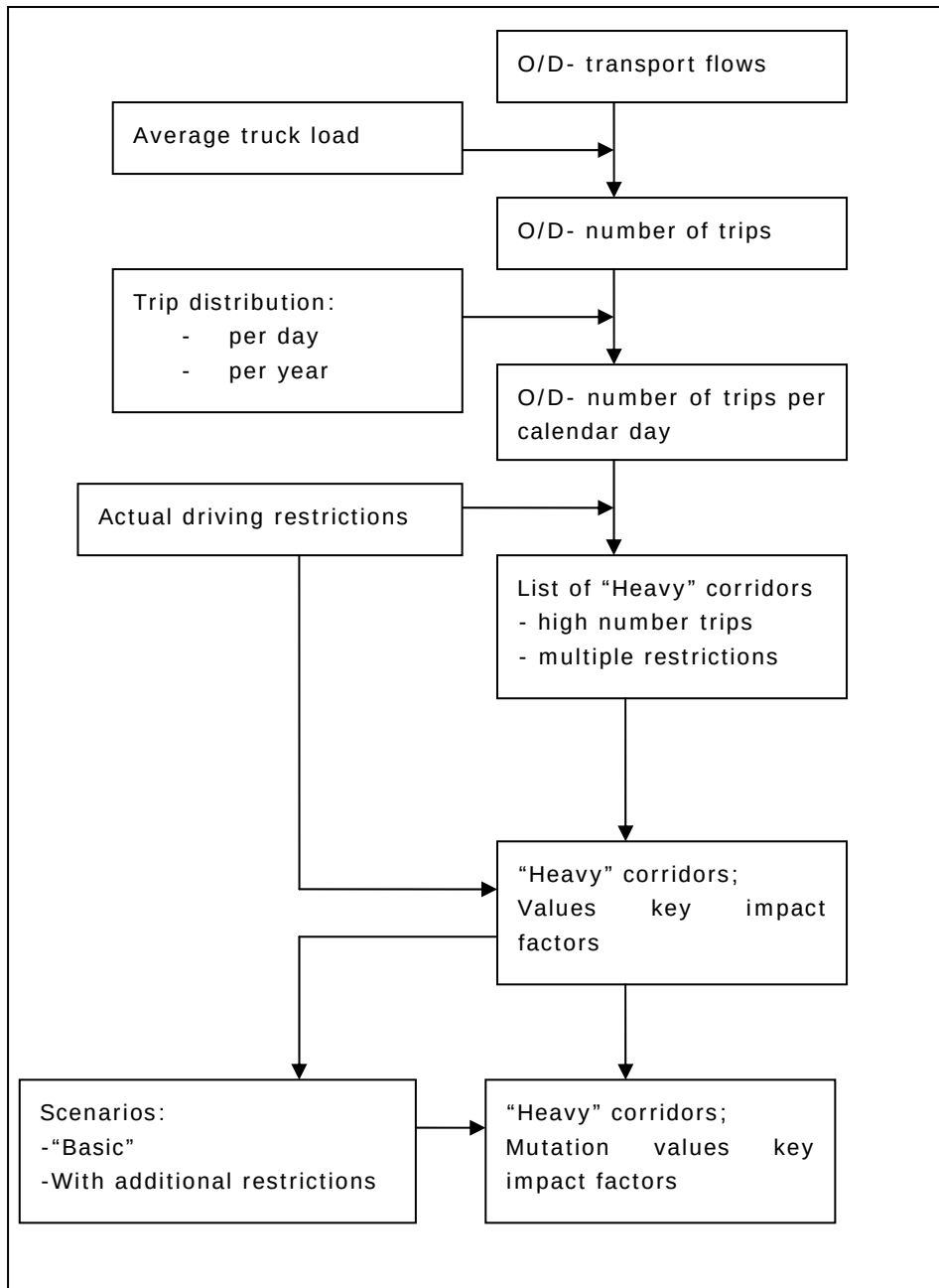
Figure 4.4 Freight flows assigned to the (major) road network crossing the Pyrenees (international freight flows)



Source: NEA-Worldnet 2008

The overall structure of the impact assessment is presented in figure 4.5.

Figure 4.5 Overall structure of the Impact Assessment



5 Impact Assessment: Route Evaluation

5.1 Overall Structure

In chapter 4 several corridors were defined using the figures on the actual level of the freight flows transiting a certain region. It was decided that the impact assessment should, at least, address these regions.

The actual impact assessment of driving restrictions was mainly performed on base of a cost calculation exercise. Two main steps were distinguished.

1. Determining the Routes

The first step concerns determining a number of routes that clearly show the effects of driving restrictions on the total transport costs from the position of the operator (step 2). The main characteristics of such routes are:

- Transiting several countries of which at least one has a strict driving ban regime.
- Representing a substantial part of the international freight flow.
- Linking with the corridors as defined in chapter 4.

An example hereof is the route Roma (IT) to Eindhoven (NL). Within this route three alternative corridors have been distinguished:

- Through Switzerland; single trip distance: 1,500 kms (passing corridor 1 of chapter 4)
- Through France; single trip distance: 1,750 kms (passing corridor 2)
- Through Austria; single trip distance: 1,685 kms (passing corridor 3).

Remark: the transport options offered by intermodal transport initiatives like "Kombiverkehr", was not taken into account in these exercises.

Other routes that have been distinguished are:

- Poznan(PL) -Rotterdam(NL) (passing corridor 4)
- Madrid(ES) -Amsterdam(NL)
 - through Bordeaux (passing corridor 5)
 - through Barcelona (passing corridor 6)

2. Determining the Direct Transport Costs

The first part of the impact assessment consisted of determining the effect of certain driving restrictions on the full financial costs of the daily operations of transport companies. In the detailed cost calculations generally accepted calculation principles were applied.

Some driving restrictions have a limited duration or only apply during certain periods of time during the day, week or year. Therefore, at least the following timeframes of transport operations were distinguished:

- Working days only
- Weekdays including a weekend
- Working days including public and/or summer holidays.

Within the cost calculation the following cost components were distinguished. On top of the value of a certain cost component on a certain route, an estimation has been made of the actual cost effect of a certain restriction.

The main cost components are:

- Fixed vehicle costs
 - Depreciation
 - Annual fixed access charges:
 - Road tax
 - Vignettes
 - Interests
 - Insurances
 - Other fixed vehicle costs
 - Costs of reserve equipment
- Variable vehicle costs
 - Depreciation
 - Tyres
 - Fuel
 - Lubricants
 - Repair and Maintenance
- Direct transport costs (tolls, etc)
- Costs of drivers
 - Salaries (incl. social taxes)
 - Subsistence costs, reimbursements
 - Other costs
- Overhead
 - Salaries of staff at office
 - Accommodation
 - Other costs

The main source of the above figures are transport operators which are monitored every year to obtain this information.

5.2 Case 1 Route Roma (IT) -Eindhoven (NL)

Transport Costs

A cost calculation exercise was performed for a truck-semitrailer combination with a total GVW of 40 tonnes. The average utilisation factor of the loading capacity of 25 tonnes is 90% for long distance road freight transport. This results in an average cargo volume of 22,5 tonnes weight equivalent¹. The number of kilometres per year that a truck will operate was determined at a level of 151,000 and the number of hours at 2,935² (see table 5.2.1 and Annex 4). For the tariffs for overnight stay allowances and weekend stay allowances figures have been obtained from transport operators. These costs are about € 40 per day for normal working days and about € 100 per weekend day.

¹ The tonnes weight equivalent is used in case of lightweight cargo.

² Source: NEA cost price study international transport (yearly updated).

Table 5.2.1 Cost calculation results for long distance road freight transport Italy-Netherlands (year= 2010)

Unit	Kms	Hours	Total
Year costs excl.')	€ 71,075	€ 108,337	€ 179,412
Number of units	151,000	2,935	
Per unit	€ 0.47	€ 3691	

') Excluded are costs of tolls like LSVA (CH), LKW-Maut, tunnel tariffs (Frejus), etc. and excl. costs of (long) rest of the driver. These costs are calculated separately.

Alternative routes

The planning department of the transport operator has three alternatives routes when crossing the Alps:

- 1 Through Switzerland (see figure 5.2.2)
- 2 Through France (see figure 5.2.3)
- 3 Through Austria (see figure 5.2.4)

Table 5.2.2 shows the number of kilometres of the countries that are visited during the transport assignment.

Table 5.2.2 Number of kilometres per country

		Route 1	Route 2	Route 3
Through		Switzerland	France	Austria
Country visited				
IT		626	740	729
CH		298	0	0
FR		0	710	0
AT		0	0	117
DE		391	0	771
BE		85	200	0
NL		100	100	68
Total distance		1,500	1,750	1,685

Source: Transport operators

Figure 5.2.2 Trip Roma(IT) to Eindhoven (NL) through Switzerland
(single trip distance: 1500 kms)



**Figure 5.2.3 Trip Eindhoven (NL) to Rome through France
(single trip distance: 1,750 kms)**



Figure 5.2.4 Trip Eindhoven (NL) to Rome through Austria
(single trip distance: 1,685 kms)



Trip Speeds

The trip speed is not only the number of driving hours (which relate to the actual driving speed) but also time for delays like border crossings, mandatory stops for short rests (driving time legislation), road checks, etc.

As these delays differ per country the average trip speed also shows some variation. As Switzerland is not part of the European Union some additional delay at the border crossings are encountered. This delay is the main cause of a lower average trip speed within this part of the Alps region when compared with the route through Austria and France (see table 5.2.3).

Table 5.2.3 Observed trip speeds

	Route 1	Route 2	Route 3
Average Driving speed	73	73	73
Trip speed non-Alps	54	54	52
Trip speed Alps	37	51	45
Average Trip speed	50	53	53

Source: NEA cost price study international transport

5.2.1 “Basic” Scenario

In the first scenario, also seen as the “normal working days” scenario, the delivery needs to be made on Thursday before 17.00 hours in Eindhoven (NL). In order to be able to make this delivery the transport has to start early in the morning of the Monday of that particular week. Calculations were made for the time period in which there are no (public) holidays. As night bans are in effect throughout the year, also in this basic scenario the effect was taken into account. The effect of weekends, public holidays and other driving restrictions are listed in other scenarios.

Route 1: Through Switzerland

The first route passes Switzerland (border crossing at Chiasso and Basel). The transport transits the following countries: Italy (IT), Switzerland (CH), Germany (DE), Belgium (BE) and the Netherlands (NL). The night bans that are in effect, are listed in table 5.2.4.

Table 5.2.4a General night bans

Night bans	IT	CH	AT	FR
Every day	None	22.00-24.00	None ¹⁾	none
Every day		00.00-05.00		

1) Although a general night driving ban is in effect for heavy freight vehicles in Austria, all freight vehicles that conform certain technical requirements are exempted of this driving restriction. These low-noise vehicles have to show the green ‘L’ plate. The vehicles are limited to a maximum speed of 60km/h, although a speed of 80km/h may be authorised on certain sections. Most of the new (Euro-5) vehicles already comply with these requirements or do after minor adaptations. It was therefore decided to drop this restriction from the calculations as international commercial road freight is generally not much hindered by it.

Table 5.2.4b General night bans

night bans	DE	BE	NL
Every day	None	None	None
Every day			

In **black** = countries visited in this case

On the basis of the average number of driving hours per day (9 hours) and the driving speed, an estimate was made for the number of driving hours a single trip will cost. The results hereof (30.3 hours) are shown in table 5.2.5. Although Switzerland is transited and this country maintains a general night driving ban, as a side effect of driving time legislation, no night driving seems to be necessary in this case. The table also shows that **no (fixed-date) driving restrictions³ has been encountered**.

**Table 5.2.5 Route specifics Route 1 (through Switzerland)
General night bans only**

Trip phase	Trip Kilometres	Driving hours
Monday (IT)	486	9.0
Tuesday (IT)	140	2.6
Tuesday (CH)	237	6.4
Wednesday (CH)	61	1.6
Wednesday (DE)	391	7.2
Thursday (BE)	85	1.6
Thursday (NL)	100	1.9
Total	1,500	30.3
Average trip speed	49.5	

In **black** = effects related to driving restrictions (in this case none)

The total costs of a trip from Roma (IT) to Eindhoven (NL) through Switzerland costs € 2,239 (see table 5.2.6). Included in this amount are costs of (road) tolls that have to be paid along the route. Other additional costs are the personal allowances (meals and beverages) for the overnight stay of the driver which in this case adds up to two days. Given an average load weight of 22.50 tonnes, the cost price for this trip is € 99.52 per tonne of cargo carried.

³ Apart from driving time legislation and “sudden” driving restrictions (= restrictions that are not known well before the actual date to the transport operators).

Table 5.2.6 Total costs per trip at Route 1 (through Switzerland)
General night bans only

	Trip Kilometres	Driving hours	
Total trip statistics	1,500	30.3	
Per unit	€ 0.47	€ 36.91	
Tolls/taxes per trip			
Tolls (IT)			€ 89.00
LSVA (CH)			€ 181.00
LKW-Maut (DE)			€ 61.00
Total			€ 331.00
costs of stay (working days)	(full) days	2	€ 83.00
Total costs per trip	€ 706,.00	€1,238.00-	€ 2,239.00
Average load weight			22.50
Costs per tonne equivalent			€ 99.52

Route 2: Through France

The second route uses the Frejus Tunnel (France). The transport transits the following countries: Italy (IT), France (FR), Belgium (BE) and the Netherlands (NL). The night bans that are in effect, are listed in table 5.2.7.

Table 5.2.7a General night bans

Night bans	IT	CH	AT	FR
Every day	None	22.00-24.00	None	None
Every day		00.00-05.00		

Table 5.2.7b General night bans

night bans	DE	BE	NL
Every day	none	None	None
Every day			

In **black**= countries visited in this case

On the basis of the average number of driving hours per day (9 hours) and the driving speed an estimate was made for the number of driving hours a single trip will cost. The results hereof (32.6 hours) are shown in table 5.2.8. The table also shows that **no driving restrictions⁴ were encountered in this case.**

⁴ Apart from driving time legislation.

Table 5.2.8 Route specifics Route 2 (through France)
General night bans only

Trip phase	Trip Kilometres	Driving hours
Monday (IT)	486	9.0
Tuesday (IT)	254	4.7
Tuesday (FR)	219	4.3
Wednesday (FR)	491	9.1
Thursday (BE)	200	3.7
Thursday (NL)	100	1.9
Total	1,750	32.6
Average trip speed	53.6	

The total costs of a trip from Roma (IT) to Eindhoven (NL) through France costs € 2,610 (see table 5.2.9). Included in this amount are costs of (road) tolls that have to be paid along the route. Other additional costs are the personal allowances (meals and beverages) for the overnight stay of the driver which in this case totals up to two days. Given an average load weight of 22.50 tonnes, the cost price is € 115.99 per tonne cargo transported.

Table 5.2.9 Total costs per trip at Route 2 (through France)
General night bans only

	Trip kilometres	Driving hours	
Total trip statistics	1,750	32,6	
Per unit	€ 0.47	€ 36.91	
Tolls/taxes per trip			
Toll (IT)			€ 105.00
Frejus (FR)			€ 255.-
Tolls (FR)			€ 138.00
Total			€ 498.00
costs of stay (working days)	(full) days	2	€ 83.00
Total costs per trip	€ 824.00	€ 1,205.00	€ 2,610.00
Average load weight			22.50
Costs per tonne equivalent			€ 115.99

Route 3: Through Austria

The third route uses the Brenner-pass (Austria). The transport transits the following countries: Italy (IT), Austria (AT), Germany (DE) and the Netherlands (NL). The night bans that are in effect, are listed in table 5.2.10.

Table 5.2.10a General night bans

Night bans	IT	CH	AT	FR
Every day	None	22.00-24.00	None	None
Every day		00.00-05.00		

Table 5.2.10b General night bans

Night bans	DE	BE	NL
Every day	none	None	None
Every day			

In **black**= countries visited in this case

On the basis of the average number of driving hours per day (9 hours) and the driving speed an estimate were made for the number of driving hours a single trip will cost. The results hereof (31,4 hours) are shown in table 5.2.11. The table also shows that **no driving restrictions⁵ have been encountered.**

Table 5.2.11 Route specifics Route 3 (through Austria)
General night bans only

Trip phase	Trip Kilometres	Driving hours
Monday (IT)	468	9.0
Tuesday (IT)	261	5.0
Tuesday (AT)	117	2.6
Tuesday (DE)	72	1.4
Wednesday (DE)	468	9.0
Thursday (DE)	231	4.4
Thursday (NL)	68	1.3
Total	1,685	31.4
Average trip speed	53.6	

The total costs of a trip from Roma (IT) to Eindhoven (NL) through Austria costs € 2,341.00 (see table 5.2.12).

Included in this amount are costs of (road) tolls that have to be paid along the route. Other additional costs are the personal allowances (meals and beverages) for the overnight stay of the driver which in this case totals up to two days.

Given an average load weight of 22.50 tonnes, a cost price results is € 104.06 per tonne cargo transported.

⁵ Apart from driving time legislation.

Table 5.2.12 Total costs per trip at Route 3 (through Austria)
General night bans only

	Trip Kilometres	Driving hours	
Total trip statistics	1,685	31.4	
Per unit	€ 0.47	€ 36.91	
Tolls/taxes per trip			
Tolls (IT)			€ 104.00
Tolls (AT)			€ 81.00
LKW- Maut (DE)			€ 120.00
Total			€ 305.00
costs of stay (working days)	(full) days	2	€ 83.00
Total costs per trip	€ 793.00	€ 1,161.00	€ 2,341.00
Average load weight			22.50
Costs per tonne equivalent			€ 104.06

5.2.2 “Weekend Ban” Scenario

In the second scenario the delivery needs to be made on Monday before 17.00 hours in Eindhoven (NL). In order to be able to make this delivery the transport needs to start early in the morning of Thursday of the preceding week. Calculations were made for the time period in which there are no (public) holidays. The effect of public holidays and other driving restrictions are listed in later scenarios. The actual weekend bans (and general night bans) are listed in table 5.2.13.

Table 5.2.13a Weekend and night bans

Weekend bans	IT	CH	AT	FR
Saturdays	None	22.00-24.00	15.00-24.00	22.00-24.00
Sundays	08.00-22.00	00.00-24.00	00.00-22.00	00.00-22.00
Night bans	IT	CH	AT	FR
Every day	None	22.00-24.00	None	None
Every day		00.00-05.00		

Table 5.2.13b Weekend and night bans

Weekend bans	DE	BE	NL
Saturdays	none	None	None
Sundays	00.00-22.00		None
night bans	DE	BE	NL
Every day	none	None	None
Every day			

Route 1: Through Switzerland

The delivery needs to take place on Monday in Eindhoven(NL). The weekend ban does not have an effect on the routing of this trip through Switzerland nor on its costs. The transport figures are comparable with those of the basic scenario (see tables 5.2.5 and 5.2.6).

Route 2: Through France

The delivery needs to take place on Monday in Eindhoven(NL). The weekend ban does not have an effect on either the routing of this trip through France or on its costs (see also tables 5.2.8 and 5.2.9).

Route 3: Through Austria

The delivery needs to take place on Monday in Eindhoven(NL). As a result of the weekend ban (in fact "Sunday" ban) in Germany some costs effects have been encountered (see tables 5.2.14 and 5.2.15).

Table 5.2.14 Route specifics Route 3 (through Austria)
Weekend and general night bans

Trip phase	Trip Kilometres	Driving hours
Thursday (IT)	468	9.0
Friday (IT)	261	5.0
Friday (AT)	117	2.6
Friday (DE)	81	1.4
Saturday (DE)	468	9.0
Stay Sunday (DE)		
Monday (DE)	222	4.4
Monday (NL)	68	1.3
Total	1,685	31.4
Average trip speed	53.6	

In **black**= effect of weekend ban

Table 5.2.15 Total costs per trip at Route 3 (through Austria)
Weekend and general night bans

	Trip Kilometres	Driving hours	
Total trip statistics	1,685	31.4	
Per unit	€ 0.47	€ 36.91	
Tolls/taxes per trip			
Tolls (IT)			€ 104.00
Tolls (AT)			€ 81.00
LKW- Maut (DE)			€ 120.00
Total			€ 305.00
costs of stay (working days)			€ 83.00
Stay Sunday			€ 103.00
Total costs per trip	€ 793.00	€ 1,161.00	€ 2,444.00
Average load weight			22.50
Costs per tonne equivalent			€ 108.64

5.2.3 “(Summer) Holiday Ban” Scenario; Delivery Thursday

In the third scenario, the delivery needs to be made on Thursday before 17.00 hours in Eindhoven (NL). In order to be able to make this delivery the transport has to start early in the morning of the Monday of that particular week. Calculations are made for the time period in which there are summer holidays. As night bans have effect throughout the year, also in this scenario the effect has to be taken into account. The effect of weekend and other driving restrictions are listed in other scenarios.

As all (summer) holiday bans concern in principle only “Saturdays”, as in this scenario no weekends are incorporated, no costs effects will be encountered. All figures of this scenario thus correspond with the figures of the basic scenario (see tables 5.2.5/6, 5.2.8/9 and 5.2.11/12).

5.2.4 “(Summer) Holiday Ban” Scenario; Delivery Monday

In the fourth scenario the delivery needs to be made on Monday before 17.00 hours in Eindhoven (NL). In order to be able to make this delivery the transport has to start early in the morning of Thursday of the preceding week. Calculations are made for the time period in which there are summer holidays. As night and weekend bans have effect throughout the year, also in this scenario their combined effect was taken into account. The effects of other driving restrictions are listed in other scenarios.

Table 5.2.16a Weekend, night and summer holiday bans

Weekend bans	IT	CH	AT	FR
Saturdays	None	22.00-24.00	15.00-24.00	22.00-24.00
Sundays	08.00-22.00	00.00-24.00	00.00-22.00	00.00-22.00
Night bans	IT	CH	AT	FR
Every day	None	22.00-24.00	None	None
Every day		00.00-05.00		
Summer holiday bans	IT	CH	AT	FR
Saturdays	07.00-24.00	None	08.00-15.00	07.00-19.00
	(26/6- 28/8)		(3/7- 28/8) ¹	(10/7- 7/8)
Friday	16.00-24.00	None	None	None
	(30/7- 13/8)			

1) Limited road network

Table 5.2.16b Weekend, night and summer holiday bans

weekend bans	DE	BE	NL
Saturdays	none	None	None
Sundays	00.00-22.00		None
Night bans	DE	BE	NL
Every day	none	None	None
Summer holiday bans	DE		
Saturdays	07.00-20.00	None	None
	(3/7- 28/8) ¹		
Friday	None	None	None

1) Limited road network

Route 1: Through Switzerland

The delivery needs to be made on Monday in Eindhoven(NL). The summer holiday ban does not have an effect on the routing of this trip through Switzerland nor on its costs. The figures are therefore the same as in the basic scenario (see tables 5.2.5 and 2.5.6).

Route 2: Through France

The delivery has to be made on Monday in Eindhoven(NL). The summer holiday ban does not have an effect on the routing of this trip through France nor on its costs (see tables 5.2.8 and 5.2.9). However, as France is visited on Saturday, and a summer driving ban is in effect from 07.00 until 18.00 hours, the driver has to take a break during this period. Although possibly inconvenient, this break does not have substantial direct costs effects.

Route 3: Through Austria

The delivery has to be made on Monday in Eindhoven(NL). Beside those costs caused by the weekend and night driving bans no additional cost effects have been encountered that are directly related to "Summer holiday" bans (see also tables 5.2.14 and 5.2.15). Thus, although in Germany a summer driving ban on Saturday is maintained between 07.00 and 20.00 hours, and this ban does have its effects on the trip, the summer holiday driving ban does not affect the direct costs of the trip substantially.

5.2.5 "Sudden One Day Ban" Scenario

The fifth and last scenario is based on the "normal working days" scenario. However, in this case it has been assumed that "suddenly" a one day driving ban appears in a certain country. With "sudden" we mean that the information about this ban has not been communicated through the regular information channels such as the country documentation of road haulage associations. In this case a "sudden" (full day) ban has been presumed for the 17th of March in France.

Table 5.2.17a Weekend, night and summer holiday bans

Weekend bans	IT	CH	AT	FR
Saturdays	None	22.00-24.00	15.00-24.00	22.00-24.00
Sundays	08.00-22.00	00.00-24.00	00.00-22.00	00.00-22.00
Night bans	IT	CH	AT	FR
	None	22.00-24.00	None	None
		00.00-05.00		
"Sudden" ban	IT	CH	AT	FR
	None	None	None	17th March

Table 5.2.17b Weekend, night and summer holiday bans

weekend bans	DE	BE	NL
Saturdays	None	None	None
Sundays	00.00-22.00		None
night bans	DE	BE	NL
	None	None	None
"Sudden" ban	DE	BE	NL
	None	None	None

Route 1: Through Switzerland

The delivery has to be made on Thursday in Eindhoven(NL). The "sudden" ban has neither an effect on the routing of this trip through Switzerland or on its costs. The transport figures are therefore comparable with those of the basic scenario (see tables 5.2.5 and 5.2.6).

Route 2: Through France

The delivery has to be made on Thursday in Eindhoven(NL). As the trip visits France on Wednesday, the "sudden" ban encountered has a direct effect on the transport costs (see also tables 5.2.17 and 5.2.18). In this calculation it was assumed that the driver has been "trapped" by the ban. If this ban was foreseen, they would have selected an alternative route.

Table 5.2.17 Route specifics Route 2 (through France)
Basic scenario with "Sudden" one day ban

Trip phase	Trip Kilometres	Driving hours
Monday (IT)	486	9.0
Tuesday (IT)	254	4.7
Tuesday (FR)	219	4.3
Stay Wednesday (FR)		
Thursday (FR)	491	9.1
Friday (BE)	200	3.7
Friday (NL)¹	100	1.9
Total	1,750	32.6
Average trip speed	53.6	

1) Delivery: one day overdue.

Table 5.2.18 Total costs per trip at Route 2 (through France)
Basic scenario with "Sudden" one day ban

	Trip Kilometres	Driving hours	
Total trip statistics	1,750	32,6	
Per unit	€ 0,47	€ 36,91	
Tolls/taxes per trip			
Toll (IT)			€ 105,00
Frejus (FR)			€ 255,00
Tolls (FR)			€ 138,00
Total			€ 498,00
Stay Wednesday			€ 42,00
costs of stay (working days)	(full) days	2	€ 83,00
Total costs per trip	€ 824,00	€ 1,205,00	€ 2,652,00
Average load weight			22,50,00
Costs per tonne equivalent			€ 117,85

Route 3: Through Austria

The delivery has to made on Monday in Eindhoven(NL). As a result of the weekend ban (in fact "Sunday" ban) in Germany some costs effects were encountered (see tables 5.2.14 and 5.2.15).

The delivery has to made on Thursday in Eindhoven(NL). The "sudden" ban has no effect either on the routing of this trip through Austria or on its costs. The transport figures are therefore comparable with those of the basic scenario (see tables 5.2.11 and 5.2.12).

5.2.6 Case Overview

This paragraph concludes the determination of the effects of certain driving bans on the three route alternatives on the corridor between Roma (IT) and Eindhoven (NL). In the following tables the effects of the different types of driving bans are presented in a condensed form.

The cost levels of all scenarios are related to the cost levels as they were retrieved for the basic scenario.

Case: Route Roma (IT) -Eindhoven (NL)

- “Basic” scenario (normal working days)

**Table 5.2.19 Overview of single trip statistics route Roma(IT) - Eindhoven(NL)
General night bans only**

	Kilometres	Hours	Costs	Direct costs effect driving restrictions	%
Route 1 (Switzerland)	1500	30.3	€ 2,239	None	-
Route 2 (France)	1750	32.6	€ 2,610	None	-
Route 3 (Austria)	1685	31.4	€ 2,341	None	-

- “Weekend ban”, route Roma (IT) -Eindhoven (NL)

**Table 5.2.20 Overview of single trip statistics route Roma(IT) - Eindhoven(NL)
Weekend bans and general night bans**

	Kilometres	Hours	Costs	Direct costs effect driving restrictions	%
Route 1 (Switzerland)	1500	30.3	€ 2,239	None	-
Route 2 (France)	1750	32.6	€ 2,610	None	-
Route 3 (Austria)	1685	31.4	€ 2,444	€ 103 (2,444 - 2,341)	+4.4%

- Case “summer holiday ban”/ working days, route Roma (IT) -Eindhoven (NL)

**Table 5.2.21 Overview of single trip statistics route Roma(IT) - Eindhoven(NL)
Weekend, general night and summer holiday bans during normal working hours only**

	Kilometres	Hours	Costs	Direct costs effect driving restrictions	%
Route 1 (Switzerland)	1,500	30.3	€ 2,239	None	-
Route 2 (France)	1,750	32.6	€ 2,610	None	-
Route 3 (Austria)	1,685	31.4	€ 2,341	None	-

- Case “summer holiday ban”/ weekend days, route Roma (IT) -Eindhoven (NL)

**Table 5.2.22 Overview of single trip statistics route Roma(IT) - Eindhoven(NL)
Weekend, general night and summer holiday bans including a weekend**

	Kilometres	Hours	Costs	Direct costs effect driving restrictions	%
Route 1 (Switzerland)	1,500	30.3	€ 2,239	None	-
Route 2 (France)	1,750	32.6	€ 2,610	None	-
Route 3 (Austria)	1,685	31.4	€ 2,444	€ 103 (2,444 - 2,341)	+4.4%¹

1) This costs effect is caused by the weekend ban only and not by the holiday ban itself.

- Case “sudden one day driving ban” (working days), route Roma (IT) - Eindhoven (NL)

Within this scenario not only direct cost effects can be observed, also indirect (cost) effects should be taken into account. These effects are for instance related to the fact that the cargo has been delivered one day overdue. However, the exact amount of these costs is difficult to estimate as they are also partly related to, amongst others, the insurance policy of the transport and/or shipping company.

**Table 5.2.23 Overview of single trip statistics route Roma(IT) - Eindhoven(NL)
Weekend, general night and “sudden” bans**

	Kilometres	Hours	Costs	Direct costs effect driving restrictions	%
Route 1 (Switzerland)	1,500	30.3	€ 2,239	None	-
Route 2 (France)	1,750	32.6	€ 2,652	€ 42 (2,652-2,610)	+1.6%
Route 3 (Austria)	1,685	31.4	€ 2,341	None	-

5.3 Case 2 Route Poznan (PL) - Rotterdam (NL)

Transport costs

A cost calculation exercise was performed for a truck-semi trailer combination with a total Gross Vehicle Weight of 40 tonnes. The average utilisation factor of the loading capacity of 25 tonnes is 90% in long distance road freight transport which results in an average cargo volume of 22.5 tonnes weight equivalent⁶.

The number of Kilometres per year that a truck will operate was determined at a level of 125.000 and the number of hours at 3,030⁷ (see table 5.3.1 and Annex 4 table A.2) For the tariffs for overnight stay allowances and weekend stay allowances figures were retrieved from transport operators. These costs are about € 40 per day for normal working days and about € 100 per weekend day.

Table 5.3.1 Cost calculation results for long distance road freight transport Spain-Netherlands (year= 2010)

Unit	Kms	Hours	Total
Year costs excl.')	€ 59,750	€ 109,714	€ 169,464
Number of units	125,000	3,030	
Per unit	€ 0.48	€ 36.21	

') Excluded are costs of tolls etc. and excl. costs of (long) rest of the driver. These costs are calculated separately.

Trip Speeds

The trip speed is not only the number of driving hours (which relate to the actual driving speed) but also time for delays like border crossings, mandatory stops for short rests (driving time legislation), road checks, etc. As these delays differ per trip, the trip speed will also show some variation. The average trip speed was fixed at a level of about 57 kms/hr. Although close to the maximum driving time, a single trip therefore normally takes two days.

Figure 5.4.1. shows the route and table 5.4.2 presents the number of kilometres in the countries that are visited during the transport assignment. Although close to the maximum driving time, a single trip normally takes two days.

Table 5.4.2 Number of Kilometres per Country

Country visited	kms
PL	125
DE	725
NL	150
Total distance	1,000

Source: Transport operators

⁶ The tonnes weight equivalent is used in case of lightweight cargo.

⁷ Source: NEA cost price study international transport (yearly updated).

Figure 5.3.1 Trip Poznan (PL) to Rotterdam (NL)

Single Trip Distance: 1,000 kms)



5.3.1 Basic Scenario

In the first scenario, also seen as the “normal working days” scenario, the delivery needs to be made on Tuesday before 17.00 hours in Rotterdam (NL). In order to be able to make this delivery, the transport has to start early in the morning of the Monday of that particular week. Calculations were made for the time period in which there are no (public) holidays and no (general) night bans. The effect of weekends, public holidays and other driving restrictions are listed in next scenarios.

Route: Poznan (PL) - Rotterdam (NL)

The transport involves the following countries: Poland (PL), Germany (DE) and the Netherlands (NL). No general night bans are in effect in these countries.

On the basis of the average number of driving hours per day (9 hours) and the driving speed, an estimate has been made for the number of driving hours a single trip will cost. The results hereof (17.5 hours) has been shown in table 5.3.3. The table also shows that **no (scheduled) driving restrictions⁸ are encountered.**

⁸ Apart from driving time legislation and “sudden” driving restrictions (= restrictions that are not known well before the actual date to the transport operators).

Table 5.3.3 Route Specifics Poznan (PL) - Rotterdam (NL)
(No driving bans)

Trip phase	Trip kilometres	Driving hours
Monday (PL)	125	2.2
Monday (DE)	388	6.8
Tuesday (DE)	337	5.9
Tuesday (NL)	150	2.6
total	1,000	17.5
Average trip speed	57.0	

The total costs of a trip from Poznan (PL) to Rotterdam (NL) is € 1,243 (see table 5.3.4). Included in this amount are costs of (road) tolls that have to be paid along the route. Other additional costs are the personal allowances (meals and beverages). Given an average load weight of 22,50 tonnes, the cost price is € 55.26 per tonne transported.

Table 5.3.4 Total costs per trip on Route Poznan (PL) - Rotterdam (NL)
(No driving restrictions)

	Trip kilometres	Driving hours	
Total trip statistics	1,000	17.5	
Per unit	€ 0.48	€ 36.21	
tolls/taxes per trip			
Tolls (PL)			€ 10.00
Tolls (DE)			€ 120.00
Total			€ 130.00
costs of stay	(full) days	0	
total costs per trip	€ 478.00	€ 635.00	€ 1,243.00
Average load weight			22.50
Costs per tonne equivalent			€ 55.26

5.3.2 “Sudden One Day Ban” Scenario

The “Sudden one day ban” scenario is based on the basic or “normal working days” scenario. However, in this case it has been assumed that “suddenly” a one day driving ban appears in a certain country. With “sudden” we mean that the information about this ban has not been communicated through the regular information channels such as the country documentation of road haulage associations. In this case a “sudden” (full day) ban was presumed on the 18th of March in Germany.

Table 5.3.5 shows the driving bans that are in effect in the countries visited.

Table 5.3.5 Weekend, night, summer holiday and “sudden” bans

weekend bans	PL	DE	NL
Saturdays	none	none	none
Sundays	none	00.00-22.00	none
night bans	PL	DE	NL
	none	none	none
holiday bans	PL	DE	NL
Saturdays	none	07.00-20.00	none
		(3/7- 28/8)	
sudden ban	PL	DE	
	none	18 March	none

The tables 5.3.6 and 5.3.7 show the effect of the sudden ban. Although the direct cost effect is fairly limited to about € 42,00, the fact that the cargo is delivered one day overdue may cause substantial damage.

Table 5.3.6 Route specifics Route Poznan (PL) - Rotterdam (NL)
Basic scenario with “Sudden” one day ban

Trip phase	Trip Kilometres	Driving hours
Monday (PL)	125	2.2
Monday (DE)	388	6.8
Sudden (DE)		
Wednesday (DE)	337	5.9
Wednesday (NL)	150	2.6
total	1,000	17.5
Total	1,800	30.0
Average trip speed	57 kms/hr	

1) Delivery: one day overdue.

Table 5.3.7 Total costs per trip at Route Poznan (PL) - Rotterdam (NL)
Basic scenario with "Sudden" one day ban

	Trip Kilometres	Driving hours	
Total trip statistics	1,000	17.5	
Per unit	€ 0.48	€ 36.21	
tolls/taxes per trip			
Tolls (PL)			€ 10.00
Tolls (DE)			€ 120.00
Total			€ 130.00
costs of stay (working days)	(full) days	1	€ 42.00
Total costs per trip	€ 478.00	€ 635.00	€ 1.285.00
Average load weight			22.50
Costs per tonne equivalent			€ 57.10

5.3.3 Other Scenarios

- "Weekend-ban" scenario

In the "Weekend-ban" scenario the delivery has to be made on Monday before 17.00 hours in Rotterdam (NL). In order to be able to make this delivery the transport has to start early in the morning of Friday of the preceding week. Calculations were made for the time period in which there are no (public) holidays. Although Germany maintains a weekend driving ban (Sunday: 00.00 - 22.00 hours), this ban has no effect on the cost price of the trip as this country is not visited during the weekend. All figures for this scenario thus correspond with the figures for the basic scenario.

- "Summer holiday ban" scenario; delivery Tuesday

In the "Summer holiday ban" scenario, the delivery has to be made on Tuesday before 17.00 hours in Rotterdam (NL). In order to be able to make this delivery the transport has to start early in the morning of the Monday of that particular week. Calculations were made for the time period in which there are summer holidays. However, as all (summer) holiday bans concern in principle only "Saturdays", and as in this scenario no weekends are incorporated, no cost effects will be encountered. All the figures for this scenario thus correspond with the figures for the basic scenario.

- "Summer holiday ban" scenario; delivery Monday

In the "Summer holiday ban" scenario the delivery has to be made on Monday before 17.00 hours in Rotterdam (NL). In order to be able to make this delivery the transport has to start early in the morning of Friday of the preceding week. Calculations were made for the time period in which there are summer holidays. The vehicle routing and cost calculations show that Germany will be visited during the Saturday. As Germany maintains a summer holiday driving ban on Saturdays⁹ from 07.00 until 20.00 hours.

⁹ In addition to the general weekend ban which runs on Saturday from 22.00- 24.00 hours and Sundays from 00.00 until 22.00 hours.

Although this ban causes a break in the driving schedule of the trip, there are no additional costs. All cost figures of this scenario thus correspond with the figures of the basic scenario.

5.3.4 Case Overview

This paragraph concludes the determination of the effects of certain driving bans on the corridor between Poznan (PL) and Rotterdam (NL). In the following tables the effects of the different types of driving bans are presented in a condensed form. The cost level of all the scenarios have been related to the cost levels as they have been retrieved for the basic scenario.

- “Basic” scenario (normal working days)

**Table 5.3.8 Overview of single trip statistics route Poznan (PL) -Rotterdam (NL)
General night bans only**

	Kilometres	Hours	Costs
Route 4 Poznan-Rotterdam	1,000	17.5	€ 1,243

- “Sudden one day driving ban” scenario

Within this scenario not only direct cost effects can be observed, also indirect (cost) effects should be taken into account. These effects are, for instance, related to the fact that the cargo has been delivered one day overdue. However, the exact level of these costs is difficult to estimate as they are also partly related to, amongst others, the insurance policy of the transport and/or shipping company.

**Table 5.4.11 Overview of single trip statistics route Poznan (PL) -Rotterdam (NL)
Weekend, general night and “sudden” bans**

	Kilometres	Hours	Costs	Direct costs effect driving restrictions
Route 4 Poznan-Rotterdam	1,000	17.5	€ 1,285	+3.38%

- Other scenarios

As the calculations within the other scenarios, e.g. “Weekend ban” scenario, “Summer holiday ban”/working days scenario and “Summer holiday ban”/weekend days scenario, show no cost effects of driving bans, the results overviews are the same as for the basic scenario.

5.4 Case 3 Route Madrid (ES) - Amsterdam (NL)

Transport costs

A cost calculation exercise was performed for a truck semi-trailer combination with a total GVW of 40 tonnes. The average utilisation factor of the loading capacity of 25 tonnes is 90% in long distance road freight transport. This results in an average cargo volume of 22.5 tonnes weight equivalent¹⁰. The number of kilometres per year that a truck will operate were determined at a level of 180,000 and the number of hours at 3,050¹¹ (see table 5.4.1 and Annex 4 table A.3) For the tariffs for overnight stay allowances and weekend stay allowances figures were retrieved from transport operators. These costs are about € 40 per day for normal working days and about € 100 per weekend day.

Table 5.4.1 Cost calculation results for long distance road freight transport Spain-Netherlands (year= 2010)

Unit	Kms	Hours	Total
Year costs excl.')	€ 84,780	€ 113,030	€ 197,810
Number of units	180,000	3,050	
Per unit	€ 0.47	€ 37.06	

')

 Excluded are costs of tolls etc. and costs of (long) rest periods of the driver. These costs are calculated separately, based on the route specifics and time schedule.

Alternative routes

The planning department of the transport operator has two alternatives routes when crossing the Pyrenees (see also figure 4.5):

- 1 Through Bordeaux (corridor 5; see figure 5.4.1).
- 2 Through Barcelona (corridor 6; see figure 5.4.2).

Table 5.4.2 shows the number of kilometres in the countries that are visited during the transport assignment.

Table 5.4.2 Number of kilometres per country

	Route 1	Route 2
Through	Bordeaux	Barcelona
Country visited		
ES	200	400
FR	1,250	1,250
BE	200	200
NL	150	150
Total distance	1,800	2,000

Source: Transport operators

¹⁰ The tonnes weight equivalent is used in case of lightweight cargo.

¹¹ Source: NEA cost price study international transport (yearly updated).

Figure 5.4.1 Trip Madrid (ES) to Amsterdam (NL) through Bordeaux
(single trip distance: 1800 kms)



Figure 5.4.2 Trip Madrid (ES) to Amsterdam (NL) through Barcelona
(single trip distance: 2000 kms)



Trip Speeds

The trip speed is not only the number of driving hours (which relates to the actual driving speed) but also time for delays like border crossings, mandatory stops for short rests (driving time legislation), road checks, etc. As these delays differ per country, the average trip speed also shows some variation. However, due to the quality of the road network and the limited number of trip delays the average trip speed is fairly high at a level of about 60 kms/hr.

5.4.1 “Basic” Scenario

In the first scenario, as the “normal working days” scenario, the delivery has to be made on Thursday before 17.00 hours in Amsterdam (NL). In order to be able to make this delivery the transport has to start early in the morning of the Monday of that particular week. Calculations are made for the time period in which there are no (public) holidays. As night bans have effect throughout the year, that effect also has to be taken into account in this basic scenario. However, as none of the countries that are visited maintains night driving bans, no effects of this type of bans was encountered. The effect of weekend, public holidays and other driving restrictions are listed in later scenarios.

Route 1: Passing Bordeaux (FR)

The first route passes the city of Bordeaux. The transport involves routes in the following countries: Spain (ES), France (FR), Belgium (BE) and the Netherlands (NL). In these countries no general night bans are in effect.

On the basis of the average number of driving hours per day (9 hours) and the driving speed, an estimate was made for the number of driving hours a single trip will take. The results hereof (30.0 hours) are shown in table 5.4.3. The table also shows that **no (fixed-date) driving restrictions¹² are encountered**.

**Table 5.4.3 Route specifics Route 1 (passing Bordeaux)
(No driving bans)**

Trip phase	Trip Kilometres	Driving hours
Monday (ES)	200	3.3
Monday (FR)	340	5.7
Tuesday (FR)	540	9.0
Wednesday (FR)	370	6.2
Wednesday (BE)	170	2.8
Thursday (BE)	30	0.5
Thursday (NL)	150	2.5
total	1,800	30.0
Average trip speed	60.0	

¹² Apart from driving time legislation and “sudden” driving restrictions (= restrictions that are not known well before the actual date to the transport operators).

The total costs of a trip from Madrid (ES) to Amsterdam (NL) passing Bordeaux (FR) is € 2,223¹³ (see table 5.4.4). Included in this amount are costs of (road) tolls that have to be paid along the route. Other additional costs are the personal allowances (meals and beverages) for the overnight stays of the driver which in this case totals up to two days. Given an average load weight of 22.50 tonnes, the cost price is € 98.78 per tonne.

**Table 5.4.4 Total costs per trip at Route 1 (passing Bordeaux)
(No driving restrictions)**

	Trip Kilometres	Driving hours	
Total trip statistics	1,800	30.0	
Per unit	€ 0.47	€ 37.06	
tolls/taxes per trip			
Tolls (FR)			€ 180.00
Tolls (ES)			€ -
Total			€ 180.00
costs of stay	(full) days	2	€ 83.00
total costs per trip	€ 848.00	€ 1,112.00	€ 2,223.00
Average load weight			22,50
Costs per tonne equivalent			€ 98,78

Route 2: Passing Barcelona (ES)

The second route passes the city of Barcelona (ES). The transport transits the following countries: Spain (ES), France (FR), Belgium (BE) and the Netherlands (NL). In these countries no night driving bans are in effect.

On the basis of the average number of driving hours per day (9 hours) and the driving speed, an estimate was made for the number of driving hours a single trip will cost. The results hereof (33.3 hours) have been shown in table 5.4.5. The table also shows that **no driving restrictions¹⁴ are encountered**.

**Table 5.4.5 Route specifics Route 2 (passing Barcelona)
(No scheduled driving bans)**

Trip phase	Trip Kilometres	Driving hours
Monday (ES)	400	6.7
Monday (FR)	140	2.3
Tuesday (FR)	540	9.0
Wednesday (FR)	570	9.5
Thursday (BE)	200	3.3
Thursday (NL)	150	2.5
Total	2,000	33.3
Average trip speed	60.0	

¹³ The cost price is not equal to the actual freight rate. The cost price is the result of an (objective) cost calculation and the freight rate of the forces of supply and demand of transport. However, in a normal economic situation the cost calculation results are a close estimate of the actual freight rate.

¹⁴ Apart from driving time legislation.

The total cost of a trip from Madrid (ES) to Amsterdam (NL) passing Barcelona is € 2,500 (see table 5.4.6). Included in this amount are costs of (road) tolls that have to be paid along the route. Other additional costs are the personal allowances (meals and beverages) for the overnight stays of the driver which in this case totals up to two days. Given an average load weight of 22.50 tonnes, the cost price is € 111.13 per tonne.

Table 5.4.6 Total costs per trip at Route 2 (passing Barcelona)

	Trip Kilometres	Driving hours	
Total trip statistics	2,000	33.3	
Per unit	€ 0.47	€ 37.06	
tolls/taxes per trip			
Tolls (FR)			€ 180.00
Tolls (ES)			€ 60.00
Total			€ 240.00
costs of stay	(full) days	2	€ 83.00
total costs per trip	€ 942.00	€ 1,235.00	€ 2,500.00
Average load weight			22,50
Costs per tonne equivalent			€ 111,13

5.4.2 “Sudden One Day Ban” Scenario

The “Sudden one day ban” scenario is based on the basic or “normal working days” scenario. However, in this case it was assumed that “suddenly” a one day driving ban appears in a certain country. With “sudden” we mean that the information about this ban has not been communicated through the regular information channels such as the country documentation of road haulage associations. In this case a “sudden” (full day) ban was presumed on the 17th of March in France. Table 5.4.7. shows the driving bans that are in effect in the countries visited.

Table 5.4.7 Weekend, night, summer holiday and “sudden” bans

weekend bans	ES	FR	BE	NL
Saturdays		22.00-24.00	none	none
Sundays	17.00-24.00	00.00-22.00	none	none
	(26/6-19/9)			
night bans	ES	FR	BE	NL
	none	none	none	none
holiday bans	ES	FR	BE	NL
Saturdays	none	07.00-19.00	none	none
		(10/7- 7/8)		
sudden ban	none	FR	none	none
		17 March		

The tables 5.4.8. and 5.4.9 show the effect of the sudden ban. Although the direct cost effect is fairly limited, about € 42 the fact that the cargo is delivered one day overdue may cause substantial damage.

Table 5.4.8 Route specifics Route 5 (passing Bordeaux)
Basic scenario with "Sudden" one day ban

Trip phase	Trip Kilometres	Driving hours
Monday (ES)	200	3.3
Monday (FR)	340	5.7
Tuesday (FR)	540	9.0
Stay Wednesday (FR)		
Thursday (FR)	370	6.2
Friday (BE)	170	2.8
Friday (BE)	30	0.5
Friday (NL)	150	2.5
Total	1,800	30.0
Average trip speed	60	

1) Delivery: one day overdue.

Table 5.4.9 Total costs per trip at Route 5 (passing Bordeaux)
Basic scenario with "Sudden" one day ban

	Trip Kilometres	Driving hours	
Total trip statistics	1,800	30.0	
Per unit	€ 0.47	€ 37.06	
tolls/taxes per trip			
Tolls (FR)			€ 180.00
Tolls (ES)			€ -
Total			€ 180.00
costs of stay (working days)	(full) days	3	€ 125.00
Total costs per trip	€ 848.00	€ 1,112.00	€ 2.264.00
Average load weight			22,50
Costs per tonne equivalent			€ 100,63

5.4.3 Other Scenarios

- "Weekend ban" scenario

In the "Weekend ban" scenario the delivery has to be made on Monday before 17.00 hours in Amsterdam (NL). In order to be able to make this delivery the transport has to start early in the morning of Thursday of the preceding week. Calculations were made for the time period in which there are no (public) holidays. The effect of public holidays and other driving restrictions are listed in later scenarios. Although France maintains a weekend driving ban (Saturday: 22.00-24.00 hours and Sunday: 00.00- 22.00 hours), this ban has no effect on the cost price of the trip as this country is not crossed during the weekend. All figures of this scenario thus correspond with the figures of the basic scenario.

- “Summer holiday ban” scenario; delivery Thursday

In the “Summer holiday ban” scenario, the delivery has to be made on Thursday before 17.00 hours in Amsterdam (NL). In order to be able to make this delivery the transport has to start early in the morning of the Monday of that particular week. Calculations were made for the time period during which there are summer holidays. The effects of weekend and other driving restrictions are listed in later scenarios. However, as all (summer) holiday bans in principle concern only “Saturdays”, and as in this scenario no weekends are incorporated, no cost effects will be encountered. All figures of this scenario thus correspond with the figures of the basic scenario.

- “Summer holiday ban” scenario; delivery Monday

In the “Summer holiday ban”- scenario the delivery has to be made on Monday before 17.00 hours in Amsterdam (NL). In order to be able to make this delivery the transport has to start early in the morning of Thursday of the preceding week. Calculations were made for the time period in which there are summer holidays. As night and weekend bans have effect throughout the year, also in this scenario their combined effect has to be taken into account. The effects of other driving restrictions are listed in later scenarios. The vehicle routing and cost calculations show that France will be visited on the Saturday. France maintains a summer holiday driving ban on Saturdays¹⁵ from 07.00 until 19.00 hours. Although this ban causes a break in the driving schedule of the trip, no additional cost are foreseen. All costs figures of this scenario thus correspond with the figures of the basic scenario.

5.4.4 Case Overview

This paragraph concludes the determination of the effects of certain driving bans on the two route alternatives on the corridor between Madrid (ES) and Amsterdam (NL). In the following tables the effects of the different types of driving bans were presented in a condensed form. The cost levels of all scenarios were related to the cost levels as they were retrieved for the basic scenario.

- “Basic” scenario (normal working days)

Table 5.4.10 Overview of single trip statistics route Madrid (ES) – Amsterdam (NL)
General night bans only

	Kilometres	Hours	Costs
Route 5 (Bordeaux)	1,800	30.0	€ 2,223
Route 6 (Barcelona)	2,000	33.3	€ 2,500

- “Sudden one day driving ban” scenario

Within this scenario can not only the direct cost effects be observed, also indirect (cost) effects should be taken into account. These effects are, for instance, related to the fact that the cargo was delivered one day overdue.

¹⁵ In addition to the general weekend ban which runs Saturday from 22.00- 24.00 hours and Sundays from 00.00 until 22.00 hours.

However, the exact level of these costs is difficult to estimate as they are also partly related to, amongst others, the insurance policy of the transport and/or shipping company.

**Table 5.4.11 Overview of single trip statistics route Madrid (ES) – Amsterdam (NL)
Weekend, general night and “sudden” bans**

	Kilometres	Hours	Costs	Direct costs effect driving restrictions
Route 5 (Bordeaux)	1.800	30.0	€ 2,264	+1.87%
Route 6 (Barcelona)	2.000	33.3	€ 2,542	+1.66%

- Other scenarios

As the calculations within the other scenarios, e.g. “Weekend ban” scenario, “Summer holiday ban”/ working days scenario and “Summer holiday ban”/ weekend days scenario, show no cost effects of the driving bans, the results are the same compared with the basic scenario.

5.5 Non-Transport Costs

Reallocation of Transit Flows

Slight mutations in transport costs may alter the actual routing of the majority of the trips dramatically, especially in transport scenarios in which a transport operator has alternative routes for completing a certain trip assignment. Such an example can be found in the Alps region. In principle three main corridors can be distinguished for crossing this mountain range from South to North. The direct transport costs of these alternatives were listed in table 5.5.1.

During the year 2007 in total about 42.000 road freight trips (see Annex 2 table A.4) were performed between Italy and the Netherlands. The share per corridor (2004) was estimated and is listed in table 5.5.1. Although from a cost price perspective the route through Switzerland is the cheapest, still the majority of the trips do transit Austria. This means that some other factor(s) influence the transport operators to not choose the cheapest alternative. Such a factor could be related to the border crossing and other administrative delays, as Switzerland is not a member of the European Union. It is remarked here that although Austria maintains a night driving ban, this ban does not substantially restrict transit volumes because all Euro-5 type freight vehicles are exempted.

The cost prices can be seen in the overview in table 5.5.1. This also indicates that mutations in cost prices, for instance as a result of certain additional driving restrictions, may divert freight flows drastically. Although the corridor through the Southeast of France still has a limited share of about 10% this may easily change if Switzerland and/or Austria causes the trip cost price to increase by between 5 to 15%. Although it may appear to relieve these corridors, it will inflict substantial stress on the remaining third corridor.

Table 5.5.1 Alps corridor overview

Corridor	Direct costs per trip (2010)	Fraction as of the lowest (%)	Share (2004) ¹
1. Through Switzerland	€ 2,239.00	100%	56%
2. Through (SE) France	€ 2,610.00	117%	34%
3. Through Austria	€ 2,341.00	105%	10%
Total	-		100%

¹)Source: Alpenquerender Güterverkehr; AQGV 2004

Negative Side Effects of Weekend Bans on Traffic Safety

Several countries, such as Germany, France, Switzerland and Austria, maintain weekend driving restrictions. The reasoning behind these restrictions ranges from “Sunday rest” to “improved flow of weekend traffic”. However, this type of restriction could also inflict some severe burdens on the neighbouring countries. For example, France maintains a weekend ban starting at 22.00 hours on Saturday evening until 22.00 hours on Sunday. As a substantial fraction of the deliveries have to be made early in the morning of the first day of the new week, it does happen that a long row of freight vehicles is waiting at the borders for the end of the weekend ban. As not all border areas are sufficiently equipped to accommodate such a mass of freight vehicles, dangerous traffic situations occur while trucks park alongside the motorway.

5.6 Conclusion

Introduction

In this chapter the results of a detailed (direct) cost price study for 6 international routes were presented. The selection criterions for these routes were:

- Crossing several European countries.
- Transiting (also) countries with a substantial number driving restrictions.
- Containing a substantial part of the international freight flows.

On base of these criteria the following routes were selected:

- 1 Italy to the Netherlands transit Switzerland.
- 2 Italy to the Netherlands transit France.
- 3 Italy to the Netherlands transit Austria.
- 4 Poland to the Netherlands transit Germany.
- 5 Spain to the Netherlands passing Bordeaux (transit France, Belgium)
- 6 Spain to the Netherlands passing Barcelona (transit France, Belgium, Luxembourg).

Costs effects: Fixed date restrictions

The direct cost price effects of the fixed date driving restrictions were determined at a level of about 4.4%. However, as can be seen in table 5.6.1. most of the mutations in fixed-date restrictions do not have any effect on the direct costs at all. An explanation hereof can be found in smart planning procedures of transport operators. As the specifics of these restrictions are communicated well before the actual date of commencement, these restrictions are incorporated in the planning systems. In the short run the additional non-transport costs are also fairly limited.

Notwithstanding this fact one could imagine that a substantial increase of the number of restrictions on a certain route may divert transport flows to another route. However the determination of balance of the benefits for the one region and the costs for the other region(s) is not within the scope of this study.

Cost effects: Non-fixed date restrictions

The direct cost price effects of the non-fixed date driving restrictions were determined at a level between 1,6 and 3,4 percent (see table 5.6.1). However, these figures addresses only the direct cost price effects, other (cost) effects are thus not incorporated. As these non-fixed date driving could become effective within a very short notice, logistic flows disruptions could occur, not only with the transport operator but also, and especially, with the receiving shipper.

**Table 5.6.1 Direct cost price effects of driving restrictions
(combined effects)**

Route	Fixed date	Non-fixed date
1. IT→NL transiting CH	None	None
2. IT→NL transiting FR	None	+ 1,6 %
3. IT→NL transiting AU	+ 4,4 %	None
4. PL→NL transiting DE	None	+ 3,4 %
5. ES→NL passing Bordeaux (FR, BE)	None	+ 1,9 %
6. ES→NL passing Barcelona (FR,BE, LU)	None	+ 1,7 %

6 Conclusions and Recommendations

6.1 Conclusions

Limited Direct and Indirect Cost Effects Result from Fixed-date Driving Restrictions

The direct cost calculations that were performed in this study relate to scheduled trip patterns of companies that are specialized in a certain region. Transport assignments to destinations outside their “own” region are generally chartered out to colleague transport companies. The calculations clearly show that the direct cost effects of fixed-date driving restrictions is limited. Several scenarios and case studies did show that, if a driving restriction was effective, the consequences of this restriction on the trip cost price is generally a rise of less than 5 percent. This limited effect is largely due to the smart trip planning in which driving restrictions were surpassed or incorporated in for instance mandatory rest periods. However, transport operators mention that, and especially addressing Spain, in certain regions the planning procedures are close to getting very complicated and thus the chance of suboptimal transport operations increases and then resulting in more vehicle kilometres for doing the same transport assignment.

The more indirect (cost) effects of these types of driving restrictions are also limited. As the restriction can be foreseen, the transport company has ample time to make proper arrangements to compensate potential delays. Although there is a trend toward more and more transport companies specialising their operations in this way, at the request of the shipper a substantial minority still performs transport operations to every destination requested. For this group of companies, according to the stakeholders, the driving restrictions could cause serious costs that will easily triple those of the more specialised companies.

Limited Direct Cost Effects but Very Disturbing Indirect Effects of Non-fixed-date Driving Restrictions

In contrast to the fixed-date driving restrictions mentioned above, the non-fixed-date driving restrictions could have a very disturbing effect on the trip performance of transport companies. Although the direct cost price effect of this type of restrictions is very limited, calculations show a percentage of less than 2%, the delivery of the cargo might be delayed substantially. As this delay was not foreseen, the indirect costs could be disproportionately high. Examples of the cause of such extreme indirect costs could be the disruption of the production processes of the receiving shipper. The actual value of this type of damage in such cases was however not assessed in this study.

Driving Bans have Some Negative Social Impacts

The direct cost consequences of a fixed-date driving restriction that cause an additional day in a trip assignment, such as weekend bans, are fairly limited. The driver receives an additional daily allowance of about € 40 for every full (normal working) day en route and about € 100 for every full weekend day. The social

consequences are also believed to be fairly limited as this extra day is just “part of the job”.

However, in case of non-fixed-date (or “sudden”) driving bans, the consequences could be substantial. The disturbances inflicted by this type of driving restrictions on the trip not only affect the direct cost price of the transport assignment but also may interfere with the logistics processes at the premises of the receiving shipper. On top of this the driver himself will unexpectedly be away from home longer and transport processes (subsequently may have to be adopted).

Holiday and Weekend Bans have Negative Impacts on Traffic Safety

Although the reasoning behind maintaining of weekend (and holiday) bans is well within the interest of the inhabitants of a (region in a) certain country, the neighbouring countries could experience some negative effects hereof. As a large fraction of the deliveries has to be made early in the new week, international transports have to start well before the weekend. Especially deliveries that have to be made on Mondays in a country that maintains weekend bans, may lead to unsafe traffic situations. A large number of trucks have to wait at the border for the weekend ban to end, and not all border areas are equipped to accommodate this mass of vehicles. This could lead to dangerous traffic situations occurring.

Slight Mutations could have Substantial Consequences

Commercial road freight transport is an activity driven by economic principles and therefore by the actual level of the freight cost price. Slight mutations in this cost price may alter the exact routing of freight assignments substantially. Especially in transport patterns in which more than one alternative routing is possible between origin and destination, and in the vast majority of the trips this is the fact, a slight altering of the driving ban regime may have substantial rerouting effect on the transport flows. This rerouting also means that, although the (social, environmental, etc) problems of a certain (area within a) country could diminish, some (areas within) other countries may have to pay the price. For the neighbouring countries the extra traffic may not only cause a decrease in traffic safety, they also might be forced to invest large capitals in new infra structure or in truck parking areas.

Communication insufficiencies

Clear examples hereof show that the communication of information on new or adaptation of existing driving restrictions by legislative institutions is sometimes below average. The information is for instance only communicated in the national language and/or is distributed (too) short before the actual commencement of a certain restriction.

6.2 Recommendations

Communication of information

Most of the information on driving restrictions is communicated through the official communications of the legal entities. Nevertheless the main source of information for the transport operators is the branch organisations. Although general information on driving restrictions is freely available, some more detailed information is classified as “members only”. Not every transport operator is member of a branch organisation, this means some information on driving restrictions could be missed. It is easy to understand that if a driver is taken by surprise in case of violating a driving restriction, the results could be very costly both in time and money.

We therefore recommend that all parties involved in the information process on driving restrictions to carefully evaluate their role in this process.

As is concluded that the communication of information on driving restrictions is sometimes suboptimal (“only national language” and “too short before the actual commencement”) we therefore further recommend that all information at least is also provided in English and in a more or less standardised way.

No Non-fixed-date Restrictions

The direct cost and social effects of existing fixed-date driving restrictions is fairly limited as the transport operators and their drivers incorporate the effects into the vehicle routing schemes. However, it is not difficult to imagine that a further substantial increase of these types of restrictions could further complicate vehicle trip planning procedures. In contrast with the fixed-date driving restrictions, the non-fixed-date or “sudden” driving restrictions could have a very strong negative effect on both the direct and indirect cost of the trip assignment and also on the social well-being of the driver and his family. Thus, seen from both an economic as a social point of view, maintaining non-fixed-date driving restrictions, for instance weather related, should be next to a minimum.

Better General Restrictions as Opposed to a Lot of Exemptions

We have seen that several countries maintain long lists of mainly road section and calendar date related driving restrictions. Although generally communicated well before the actual date, these types of restrictions complicate vehicle routing dramatically. A further problem that comes with the complexity of the vehicle routing is that the productivity of the freight vehicles may drop.

We therefore recommend that the European Commission actively discourages (regions within) countries from maintaining long lists of driving restrictions per section of road and calendar date. We recommend that they stimulate applying more simple general fixed-date restrictions if a certain restriction is deemed necessary. However, when doing this the European Commission is also asked to take care of the fact that the overall burden of the restrictions for the transport sector does not increase.

Harmonize Exemptions and Windows

We have observed that there is very little correspondence between countries on the parameters of a certain restriction, although they maintain the same type of driving restriction. A striking example hereof are the time windows that go with weekend driving restrictions. We have made the same observation when addressing the exemptions on a certain restriction. We believe that this non-correspondence of driving restriction parameters burdens the road freight sector with unnecessary planning and vehicle routing challenges.

We therefore recommend stimulating the harmonisation of these parameters.

Supra-national Impact Assessment of Driving Restrictions

The in-depth study of the effects of driving restrictions at the trip level, has clearly shown that slight changes, for instance in the trip cost price as a result of an adaptation of a driving restriction, may cause a substantial shift in (transiting) goods flows. Although from the point of view of the adapting country it may seem that a (social, environmental, etc) improvement is reached, the

collective shift effects in the neighbouring countries may be such that the overall effect for the entire region is negative.

We recommend that before introduction of a (new or adapted) driving restriction an assessment is made of the overall effects of a planned substantial adaptation of a driving restrictions regime. This assessment should not only address the (direct) effects within the (region of the) country that is adapting the restriction but also the potential shift effects it may inflict on neighbouring countries.

Annex 1 Main sources of web-information

EU-countries		Websites found in internet search			
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on driving restrictions for HGVs on the website
1	Austria	http://www.oeamtc.at/verkehrsservice/	Only traffic information, updated regularly - no information for heavy good vehicles available (except for overview of LKW-Maut tracks). No information provided concerning driving restrictions or bans for neighboring countries.	German	Not applicable (N/A)
1	Austria	http://www.asfinag.at/	Only traffic information, updated regularly - no information for heavy good vehicles available. No information provided concerning driving restrictions or bans for neighboring countries.	German	N/A
1	Austria	http://www.aisoe.at/	Information on driving restrictions, bans for neighboring countries and required permits. Various other information helpful for truck drivers operating in Austria.	German	Information is clear (but only in German).
2	Belgium	http://trafiroutes.wallonie.be/trafiroutes/accueil.do	Information on motorways in Walloon region (i.e. traffic information and events, including road works, weather information, including snow information, and news items). No specific aim at HGVs. No information provided concerning driving restrictions or bans for neighboring countries.	French, Dutch, English and German	Information is clear, it is also possible to search for events (real-time and forecasts events) at different periods.
2	Belgium	http://www.verkeerscentrum.be/verkeersinfo/nieuws	Traffic information, road works and hindrance for Belgian roads. No information provided concerning driving restrictions or bans for neighboring countries.	Dutch	Website is clear, but do not specifically aim at heavy goods vehicles (and only in Dutch).
2	Belgium	http://www.wegenwerken.be/	Website with information on road works in Flemish Belgium. No information provided concerning driving restrictions or bans for neighboring countries.	Dutch	Website is clear, but do not specifically aim at heavy goods vehicles (and only in Dutch).
2	Belgium	http://www.febetra.be/	Appears to contain a lot of information on road transport, but it is inaccessible to those who are not a member of FEBETRA.	Dutch and French	N/A
3	Bulgaria	-	No information on Bulgaria was found, we performed a web-search including the keywords: ban, restriction, traffic information, road works / road construction, dangerous goods / ADR in combination with truck, heavy goods vehicle or professional transport and Bulgaria.		
3	Bulgaria	http://www.aebtri.com/	Detailed information on traffic, road works, permits and driving restrictions for specific vehicles (including HGVs). No information provided concerning driving restrictions or bans for neighboring countries.	Bulgarian, and English	Information is clear and sufficiently detailed.

EU-countries		Websites found in internet search			
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on driving restrictions for HGVs on the website
4	Cyprus	-	No website available		
5	Czech Republic	http://www.uamk.cz/cs/	Information on traffic, events, and road works. No special section for freight transport (or heavy goods vehicles). No information provided concerning driving restrictions or bans for neighboring countries.	Czech	Website is clear, but does not specifically aim at heavy goods vehicles. At the moments the website was checked there was no information on restrictions and bans.
5	Czech Republic	http://www.dopravniiinfo.cz/	Only traffic information, updated regularly - no information for heavy good vehicles available. No information provided concerning driving restrictions or bans for neighboring countries.	Czech	Website is clear, but does not specifically aim at heavy goods vehicles. At the moments the website was checked there was no information on restrictions and bans. Does provide a great platform that could easily include restrictions/bans.
5	Czech Republic	http://www.prodopravce.cz	Information on traffic, driving restrictions, speed limits, weight limits. No information provided concerning driving restrictions or bans for neighboring countries.	Czech, English, German	Website is clear, but a large part of it is only in Czech.
6	Denmark	http://www.trafikken.dk/trafikken.asp?page=company&objno=7	Only traffic information, updated regularly - no information for heavy good vehicles available. No information provided concerning driving restrictions or bans for neighboring countries.	Danish and English	N/A
6	Denmark	http://www.dtl.eu/	Website with information for truck operators and truck drivers. No information provided concerning driving restrictions or bans for neighboring countries.	Danish and English	N/A
6	Denmark	http://www.itd.dk	Website with information on Danish road transport, but it is inaccessible to those who are not a member of ITD.	Danish	N/A
7	Estonia	http://www.mnt.ee/atp/	Traffic information and general information on roads in Estonia (no specific information for heavy goods vehicles). No information provided concerning driving restrictions or bans for neighboring countries.	Estonian and English	N/A
7	Estonia	http://www.eraa.ee/	General information on road transport. No information provided concerning driving restrictions or bans for neighboring countries.	Estonian and English	The website has not been updated since 2004.
8	Finland	http://alk.tiehallinto.fi/alk/english/frames/lii/kenne-frame.html	Information on road weather, road works and traffic information. No specific information for heavy goods vehicles. No information provided concerning driving restrictions or bans for neighboring countries.	Finnish, Swedish and English	Some parts (e.g. road works) are only in Finnish.
8	Finland	http://www.skaf.fi/	General information about businesses that transport goods over road. No information provided concerning driving restrictions or bans for neighboring countries.	Finnish, Swedish and English	N/A
EU-countries		Websites found in internet search			

#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on driving restrictions for HGVs on the website
9	France	http://www.autoroute.s.fr/index.php	Autoroute has real time traffic information available including speed limits on specific stretches of roads. No detailed information for heavy good vehicles is available. No information provided concerning driving restrictions or bans for neighboring countries.	French & English	N/A
9	France	http://www.bisonfute.equipement.gouv.fr/diri/Accueil.do	A specified piece is dedicated to transport information for trucks. This information contains information about restrictions both long-term and short-term/ad-hoc. Interesting fact is that this information is not displayed in the English version of the website. Also, traffic information is displayed for parts of neighboring countries.	French (only long-term restrictions in English)	Website can be found through a direct link from the ministry of transport, although you need to know what you are looking for.
9	France	http://www.fntr.fr/	Website is a hub for French road transport in general, including news and developments. No information provided concerning driving restrictions or bans for neighboring countries.	French	N/A
9	France	http://www.aftri.com/	Mostly traffic congestion and road works information. No information provided concerning driving restrictions or bans for neighboring countries.	French and English (limited)	N/A
10	Germany	http://www.autobahn.nrw.de/	Only traffic congestion information for German region North Rhine Westphalia. No special section for freight transport (or heavy goods vehicles). Site has a regional focus so no information provided concerning driving restrictions or bans for neighboring countries.	German, English, French, Dutch	N/A
10	Germany	http://www.bmv.de/	Fixed, holiday-related driving bans are communicated in relation to heavy goods vehicles. No information provided concerning driving restrictions or bans for neighboring countries.	German, English (limited)	Clear and concise, yet very limited information available (esp. in English)
10	Germany	http://www.bgl-ev.de/	Information on driving restrictions. News and developments in German road transport. No information on driving restrictions or bans for neighboring countries.	German	Information is clear but only available in German.
10	Germany	http://www.bwvl.de/	General information about German road transport. No information provided concerning driving restrictions or bans for neighboring countries.	German	N/A
11	Greece	http://www.myroute.gr/traffic.html	Mostly traffic congestion and road works information. No information pertaining to driving restrictions for heavy goods vehicles. No information provided concerning driving restrictions or bans for neighboring countries too.	Greek	Rather cryptic since information is only available in Greek.
12	Hungary	http://www.motorway.hu/	Traffic information on the highways of Hungary (based on road works). No information provided concerning driving restrictions or bans for neighboring countries.	Available in many languages	Cryptical information - at least for foreigners

EU-countries		Websites found in internet search			Clarity of information on driving restrictions for HGVs on the website
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	
12	Hungary	http://www.mkfe.de/	Detailed information on national driving restrictions and bans. No information provided concerning driving restrictions or bans for neighboring countries.	Hungarian and English	Information is clear but the website is not easy to browse.
13	Ireland	http://www.nratraffic.ie/	Information on traffic, events, road works, road weather, and travel times. No special section for freight transport (or heavy goods vehicles). Ireland does not really have adjacent neighboring countries so no information is provided concerning driving restrictions or bans for neighboring countries.	English	Website is clear, but does not specifically aim at heavy goods vehicles. At the moments the website was checked there was no information on restrictions and bans.
13	Ireland	http://irha.ie/	The IRHA represents Irish road haulage operators. There is no information on HGVs and no information on driving restrictions or bans.	English	N/A
14	Italy	http://www.aiscat.it/	Sites link to each other: information on (among other things) real-time traffic, weather, routes and tolls and rest areas. No specific information on HGVs. No information provided concerning driving restrictions or bans for neighboring countries.	Italian and English	Website is clear, but does not specifically aim at heavy goods vehicles.
14	Italy	http://www.autostrade.it/en/autostrade/home.do	Sites link to each other: information on (among other things) real-time traffic, weather, routes and tolls and rest areas. No specific information on HGVs. No information provided concerning driving restrictions or bans for neighboring countries.	Italian and English	Website is clear, but does not specifically aim at heavy goods vehicles.
14	Italy	http://www.confetra.com/	News hub for legislation concerning Italian road transport. Contains detailed information concerning driving restrictions or bans for neighboring countries.	Italian	Information is clear but difficult to find.
14	Italy	http://www.conftrasporto.it	Information on legislation concerning national driving restrictions. No information provided concerning driving restrictions or bans for neighboring countries.	Italian	Website is only in Italian and links only to the full legislative text, making it more difficult to understand.
15	Latvia	http://www.lvceli.lv/LV/?i=1	Traffic information center information is available, restrictions based on weights are available. No information provided concerning driving restrictions or bans for neighboring countries.	Latvian and English	N/A
15	Latvia	http://www.lauto.lv/	News website regarding Latvian road transport. No information provided concerning driving restrictions or bans for neighboring countries.	Latvian, Russian and English	Website has not been updated in years.
16	Lithuania	http://www.lra.lt/	Weather information and 'black spots' information only. No detailed information for heavy good vehicles is available	Lithuanian, English	N/A
16	Lithuania	http://www.linava.lt/	Lithuanian road carriers' association. No relevant information is available to the public.	Lithuanian, English	N/A
17	Luxembourg	http://www.cita.lu/	Real time traffic information and regular driving restrictions are available (Sunday driving bans). Traffic conditions for neighboring countries are available, however not specifically on driving restrictions.	French, German and English	N/A

EU-countries		Websites found in internet search			
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on driving restrictions for HGVs on the website
17	Luxembourg	http://www.clc.lu/	Organization that represents various companies that operate in the field of trade and/or transport. No information on driving restrictions or bans.	French	N/A
18	Malta	-	No information on Malta was found, we performed a web-search including the keywords: ban, restriction, traffic information, road works / road construction, dangerous goods / ADR in combination with truck, heavy goods vehicle or professional transport and Malta.	N/A	N/A
19	the Netherlands	http://www.vid.nl/	Sites with traffic information and road works (and bans due to road works), no specific aim at HGVs. Traffic information for continental Europe is available, however not specifically on driving restrictions.	Dutch	Websites are clear, but do not specifically aim at heavy goods vehicles. Information comes from website of Rijkswaterstaat (except for traffic information), see for example www.twitter.com/rijkswaterstaat
19	the Netherlands	http://www.anwb.nl	Sites with traffic information and road works (and bans due to road works), no specific aim at HGVs. No information provided concerning driving restrictions or bans for neighboring countries.	Dutch	Websites are clear, but do not specifically aim at heavy goods vehicles. Information comes from website of Rijkswaterstaat (except for traffic information), see for example www.twitter.com/rijkswaterstaat
19	the Netherlands	http://www.tln.nl	Large site with a lot of information on Dutch transport. There is a section dedicated to driving restrictions, saying the Netherlands does not have any and arguing that other countries shouldn't have them either.	Dutch	Website is only in Dutch and it is difficult to find the information you want. Part of it is also member-restricted.
19	the Netherlands	http://www.knv.nl	Very detailed information concerning current driving restrictions in all European countries. Lists the vehicles the restrictions apply to, the hours when the restriction is active and specific road sections (where applicable).	Dutch	Website is clear and easy to browse.
19	the Netherlands	http://www.niwo.nl	General information for road haulage operators, particularly for permits. No information provided concerning driving restrictions or bans for neighboring countries.	Dutch	N/A
20	Poland	http://www.gddkia.gov.pl/index.php	Driving restrictions reported alongside traffic information, black spots et cetera. Detailed information for heavy good vehicles is available. Traffic information for continental Europe is available, however not specifically on driving restrictions (although designated as such).	Polish (and English, German, French, Russian albeit very limited)	Information is clear, although only readily available in Polish
20	Poland	http://www.zmpd.pl	General information for road haulage operators and truck drivers. Focus on new developments. No information provided concerning driving restrictions or bans for neighboring countries.	Polish	Website is difficult to browse and only in Polish.

EU-countries		Websites found in internet search			
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on driving restrictions for HGVs on the website
21	Portugal	http://www.antram.pt	General information for road haulage operators and truck drivers. Most information inaccessible if not a member of ANTRAM.	Portuguese	N/A
21	Portugal	http://www.estradas.pt/	Information on traffic, events, road works, and road weather. No special section for freight transport (or heavy goods vehicles). No information provided concerning driving restrictions or bans for neighboring countries.	Portuguese	Cryptical information - at least for foreigners
22	Romania	http://www.politiaromana.ro	Traffic information and other police issues. No indication of information availability concerning driving restrictions or bans for neighboring countries.	Romanian (extensive), English (limited, e.g. no traffic information)	Information on traffic is cryptically (only in Romanian)
22	Romania	http://www.cnadnr.ro/	Website of company responsible for high ways and national roads in Romania. Site provides information for users (including information for road transport; e.g. monthly traffic ,restrictions, weight limitations, and other information), No information provided concerning driving restrictions or bans for neighboring countries.	Romanian only	Difficult to read (only in Romanian). Limitations/restrictions per region could be downloaded, but file extension not recognized. So the information is difficult to assess.
22	Romania	http://www.untrr.ro	Information on driving restrictions and bans, speed limits, weight limits, bilateral agreements. Contains both long-term and short-term restrictions.	Romanian and English	The English version of the website is very clear and concise.
22	Romania	http://www.artri.ro	National association for international road transport. Contains general information. No information provided concerning driving restrictions or bans for neighboring countries.	Romanian and English	N/A
23	Slovakia	http://www.stellaservis.sk	Information on traffic, events, road works. No special section for freight transport (or heavy goods vehicles). No information provided concerning driving restrictions or bans for neighboring countries.	Slovak	Information on traffic is cryptically (only in Slovak)
23	Slovakia	http://www.zjazdnost.sk	Information on traffic and road works. No special section for freight transport (or heavy goods vehicles). No information provided concerning driving restrictions or bans for neighboring countries.	Slovak	Information on traffic is cryptically (only in Slovak)
23	Slovakia	http://www.cesmad.sk	Information on traffic, events, road works. Some general directives and guidelines. No information provided concerning driving restrictions or bans for neighboring countries.	Slovak, German and English	Most information is only in Slovak.
24	Slovenia	http://www.promet.si	Information on traffic, events, road works, and road weather. Special section for freight transport available (or heavy goods vehicles) including various permanent driving restrictions. Also, restrictions for a neighboring country are reported (Austria).	Slovenian, English	Information is clear and readily available

EU-countries		Websites found in internet search			
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on driving restrictions for HGVs on the website
24	Slovenia	http://www.intertransport.si	There appears to be some relevant information on the website but it is inaccessible.	Slovenian	Website does not function properly
25	Spain	http://infocar.dgt.es/etrafic/Home?idiona=en_GB/	No driving restrictions. Only traffic information about road works and traffic jams. No information provided concerning driving restrictions or bans for neighboring countries.	Spanish, English & French	N/A
25	Spain	http://www.dgt.es/portal/	Restrictions throughout the country except for the autonomous communities of Catalonia and the Basque Country to have transferred the responsibility for traffic. But these only cover permanent restrictions. No information on restrictions for neighboring countries.	Spanish	After some further searching you get to a pdf which explains some information about the permanent driving restrictions. http://www.trafiko.net/public/wps/portal/trafico/kcxmi/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzKLd4s3NggBSZnFO8ZbeulHogt5IoSC9L31fT3yc1P1A_QLckMjyh0dFQG_IMIP/delta/base64xml/L3dJdyEvd0ZNQUFzQUMvNEIVRS82X0ZfMkdE
25	Spain	http://www.astic.net	National association for international road transport. There is no relevant information on the website.	Spanish	N/A
26	Sweden	http://sverigesradio.se/trafik/	Only traffic information for regular road works and public transport (is a news website). No information provided concerning driving restrictions or bans for neighboring countries.	Swedish	N/A
26	Sweden	http://www.akeri.se	National association for international road transport. Contains general information. No information provided concerning driving restrictions or bans for neighboring countries.	Swedish	N/A
27	the United Kingdom	http://www.theaa.com/traffic-news/index.jsp	The AA is the driving association of the UK so therefore no relevant information for trucks can be found here. No information provided concerning driving restrictions or bans for neighboring countries.	N/A	N/A
27	the United Kingdom	http://www.highways.gov.uk/	This site contains information for truck drivers, but no driving restrictions information. The website of the ministry also doesn't contain any information on driving restrictions. A search action on driving restriction didn't generate any useful result.	N/A	N/A
27	the United Kingdom	http://www.dft.gov.uk/pgr/roads/	This site contains information for truck drivers, but no driving restrictions information. The website of the ministry also doesn't contain any information on driving restrictions. A search action on driving restriction didn't generate any useful result.	N/A	N/A

EU-countries		Websites found in internet search			
#	EU 27+2	Website	Contents (and information specifically aiming at HGVs)	Language used	Clarity of information on driving restrictions for HGVs on the website
27	the United Kingdom	http://www.rha.uk.net	This site contains information for road haulage operators and truck drivers, but no driving restrictions information. No information provided concerning driving restrictions or bans for neighboring countries.	English	N/A
27	the United Kingdom	http://www.fta.co.uk	Information on latest developments in UK freight transport in general. No practical information on driving restrictions. No information on driving restrictions or bans for neighboring countries.	English	N/A
28	Norway	http://www.vegvesen.no/Kjoretoy	Information for all road users. A special part is dedicated to heavy goods vehicles. This part includes information ADR routes and other regulations. The site also includes traffic information and information on road constructions. No information provided concerning driving restrictions or bans for neighboring countries.	Norwegian (extensive), English (limited, e.g. no special section for heavy goods vehicles)	Information for professional transporters is only in Norwegian. Information is clear, but is only includes fixed regulations, no 'non-fixed date' restrictions were found
28	Norway	http://www.lastebil.no/	Information for road haulage operators. There is some general information on driving restrictions but nothing for neighboring countries.	Norwegian (extensive), English (limited)	Information is clear but very limited and most is only in Norwegian
29	Switzerland	http://www.tcs.ch/main/de/home/verkehrsinfo.html	Information on traffic, mountain passes, road works, road weather. No special section for freight transport (or heavy goods vehicles). No information provided concerning driving restrictions or bans for neighboring countries.	German, French, Italian	Information is scarce
29	Switzerland	http://www.astag.ch	Information for road haulage operators. Information on latest developments and political issues. No information on driving restrictions.	German, French	N/A
29	Switzerland	http://www.truckinfo.ch/	Driving restrictions/bans reported alongside traffic information, road conditions, weather, road works et cetera. Also includes some information on driving restrictions/bans for neighboring countries, only for regions in close proximity.	German, English, Italian, French	Website is clear and does specifically aim at heavy goods vehicles. More information concerning bans (date, duration etc.) could be added.
	EU	http://www.europeantransportregistry.eu/	Website with data relating to transport companies for goods and persons of the 27 Member States of the European Union. HGV bans and weekend bans for 17 members states are reported.	English, Spanish, French and Italian	Information on fixed data driving restrictions.
	EU	http://www.transportfriend.org/int/bans.html	Website with details for driving bans on specific days and times by country in AETR and EEA Countries.	English	Basic information on fixed bans for HGVs in European countries.

Annex 2 Statistics on Number of Trips

Table A.1 Number of international trips in 2007
(estimates on the basis of goods flows)

	Destination				
Origin	Austria	Belgium	Bulgaria	Cyprus	Czech Rep.
Austria		14,445	5,227	376	91,308
Belgium	21,451		1,436	2,359	26,892
Bulgaria	1,795	938		7,191	1,525
Cyprus	49	1,251	155		876
Czech Rep.	212,077	18,599	4,872	201	
Denmark	1,997	9,521	1,114	445	4,099
Estonia	627	847	41	23	547
Finland	7,027	14,248	1,088	392	5,708
France	27,366	849,245	3,463	7,290	31,804
Germany	738,802	552,149	15,311	5,344	438,785
Greece	1,176	1,563	43,286	34,068	2,450
Hungary	136,696	7,045	11,291	1,502	44,346
Ireland	614	1,866	48	0	377
Italy	145,152	70,979	12,567	20,135	50,916
Latvia	719	1,553	0	669	1,214
Lithuania	743	3,076	122	976	3,859
Luxembourg	1,206	48,121	36	16	2,523
Malta	0	29	0	0	35
Netherlands	37,880	392,864	3,457	2,205	39,301
Norway	181	3,211	0	162	2,527
Poland	44,114	33,876	8,080	1,253	208,861
Portugal	460	6,026	98	852	781
Romania	11,109	4,190	49,502	3,846	7,392
Slovakia	64,473	5,443	2,610	647	359,714
Slovenia	48,665	1,151	1,755	114	8,429
Spain	5,116	23,377	2,180	4,262	10,803
Sweden	121	4,320	626	566	1,527
Switzerland	40,176	7,242	1,549	264	3,938
UK	2,838	101,632	2,007	2,427	5,568
Total	1,552,633	2,178,808	171,922	97,585	1,356,103

Table A.2 Number of international trips in 2007
(estimates on the basis of goods flows)

Origin	Destination				
	Denmark	Estonia	Finland	France	Germany
Austria	2,899	1,061	4,122	35,656	493,490
Belgium	23,208	1,682	3,395	1,118,677	571,782
Bulgaria	233	53	338	5,710	8,826
Cyprus	193	21	13	306	3,994
Czech Rep.	5,527	1,333	2,994	30,953	493,943
Denmark		1,293	321	11,731	145,797
Estonia	4,188		36,233	1,933	7,795
Finland	660	20,091		9,934	53,378
France	12,371	1,970	3,752		666,114
Germany	242,204	12,779	35,786	880,810	
Greece	442	113	1,833	4,705	11,306
Hungary	1,531	1,308	1,840	14,390	150,835
Ireland	724	64	625	11,888	13,144
Italy	4,608	1,951	7,393	639,803	464,737
Latvia	4,102	26,555	27,225	2,325	15,104
Lithuania	7,591	16,962	5,392	5,073	27,079
Luxembourg	1,051	70	120	51,618	62,787
Malta	0	0	0	236	2,210
Netherlands	47,150	5,744	6,499	235,238	994,053
Norway	15,054	554	6,268	12,060	8,994
Poland	31,503	12,431	9,925	57,851	548,382
Portugal	345	141	59	37,292	30,167
Romania	189	80	292	18,034	32,029
Slovakia	2,011	316	1,154	11,706	108,007
Slovenia	178	50	302	9,652	35,439
Spain	3,941	763	3,202	484,984	92,673
Sweden	85,422	8,686	7,901	2,632	57,613
Switzerland	1,396	141	410	117,931	184,584
UK	34,428	2,094	55,887	160,913	180,984
Total	533,148	118,306	223,280	3,974,039	5,465,245

Table A.3 Number of international trips in 2007
(estimates on the basis of goods flows)

Origin	Destination				
	Greece	Hungary	Ireland	Italy	Latvia
Austria	8,223	68,321	905	389,569	1,669
Belgium	11,888	6,518	7,430	100,679	1,365
Bulgaria	57,446	3,071	21	13,016	106
Cyprus	5,234	47	0	2,471	134
Czech Rep.	5,511	67,518	461	55,582	2,925
Denmark	4,049	1,264	2,729	9,800	2,339
Estonia	81	271	161	2,636	21,212
Finland	9,569	6,431	888	11,562	4,671
France	24,977	9,377	33,562	700,202	959
Germany	44,271	134,971	17,286	630,669	13,491
Greece		1,801	162	16,092	134
Hungary	9,159		203	92,798	1,753
Ireland	251	112		10,359	10
Italy	53,619	50,543	12,914		2,550
Latvia	107	626	1,467	1,441	
Lithuania	191	827	1,190	3,196	107,714
Luxembourg	374	502	0	4,744	26
Malta	12	0	3	1,930	0
Netherlands	15,153	23,605	15,459	69,890	5,515
Norway	1,039	269	6,539	1,542	635
Poland	3,912	66,906	1,194	57,739	17,689
Portugal	1,415	679	3,317	14,231	1,536
Romania	13,977	72,480	185	37,280	0
Slovakia	3,029	106,188	47	37,123	0
Slovenia	1,311	28,575	169	135,628	46
Spain	13,952	5,465	14,883	176,834	911
Sweden	2,100	7,407	4,029	1,470	5,369
Switzerland	412	1,812	2,685	93,861	81
UK	12,508	3,396	476,111	90,538	918
Total	303,768	668,983	603,999	2,762,878	193,759

Table A.4 Number of international trips in 2007
(estimates on the basis of goods flows)

Origin	Destination				
	Lithuania	Luxembourg	Malta	Netherlands	Norway
Austria	2,012	1,309	607	23,321	251
Belgium	4,382	104,890	905	376,299	2,923
Bulgaria	210	14	991	1,805	141
Cyprus	993	0	0	363	84
Czech Rep.	5,312	1,056	33	17,328	996
Denmark	4,766	216	156	24,181	23,037
Estonia	14,562	4	18	4,323	4,489
Finland	4,435	271	39	3,208	5,253
France	4,343	88,383	2,287	177,694	1,874
Germany	33,371	100,223	1,996	1,055,281	11,746
Greece	225	6	3,195	2,439	47
Hungary	3,789	205	598	18,129	695
Ireland	42	42	86	6,621	10,702
Italy	5,666	2,870	32,015	42,326	2,208
Latvia	50,514	0	185	8,262	2,924
Lithuania		26	17	7,280	4,566
Luxembourg	96		5	7,071	13
Malta	34	0		11	2
Netherlands	13,133	7,169	1,813		7,492
Norway	1,457	46	388	5,122	
Poland	63,103	1,262	198	48,491	6,273
Portugal	105	633	204	6,230	186
Romania	0	54	2,053	8,129	1,683
Slovakia	2,267	210	13	5,575	246
Slovenia	354	366	30	1,757	3
Spain	1,520	1,230	5,845	23,927	5,181
Sweden	6,191	78	15	20,269	169,376
Switzerland	1,040	901	20	9,207	198
UK	2,962	1,523	9,174	174,420	114,740
Total	226,887	312,983	62,887	2,079,070	377,326

Table A.5 Number of international trips in 2007
(estimates on the basis of goods flows)

	Destination				
Origin	Poland	Portugal	Romania	Slovakia	Slovenia
Austria	59,740	1,435	34,401	38,434	116,475
Belgium	44,951	8,602	6,086	6,805	3,893
Bulgaria	3,874	252	50,065	1,402	848
Cyprus	617	120	84	100	78
Czech Rep.	418,783	1,278	24,347	240,820	20,850
Denmark	19,981	706	1,897	1,040	178
Estonia	4,695	138	0	212	41
Finland	24,228	191	1,200	1,685	885
France	46,581	37,261	15,260	7,474	8,084
Germany	589,017	32,616	55,906	101,471	36,072
Greece	4,552	293	8,960	504	1,854
Hungary	72,258	1,001	115,869	86,829	51,742
Ireland	998	1,934	158	32	0
Italy	59,671	17,917	37,587	29,127	83,402
Latvia	9,595	55	37	754	49
Lithuania	48,222	123	406	299	82
Luxembourg	2,285	361	255	264	391
Malta	1,868	37	0	0	0
Netherlands	83,980	19,490	13,084	8,286	5,008
Norway	5,332	938	416	89	21
Poland		1,960	41,293	77,215	8,594
Portugal	2,451		90	513	266
Romania	14,439	445		5,079	1,888
Slovakia	149,336	680	21,645		11,290
Slovenia	8,543	239	3,848	4,557	
Spain	16,388	289,020	6,055	3,415	3,013
Sweden	16,743	2,969	2,644	466	41
Switzerland	4,358	591	2,582	798	954
UK	13,221	78,191	95	295	1,359
Total	1,726,705	498,838	444,271	617,966	357,358

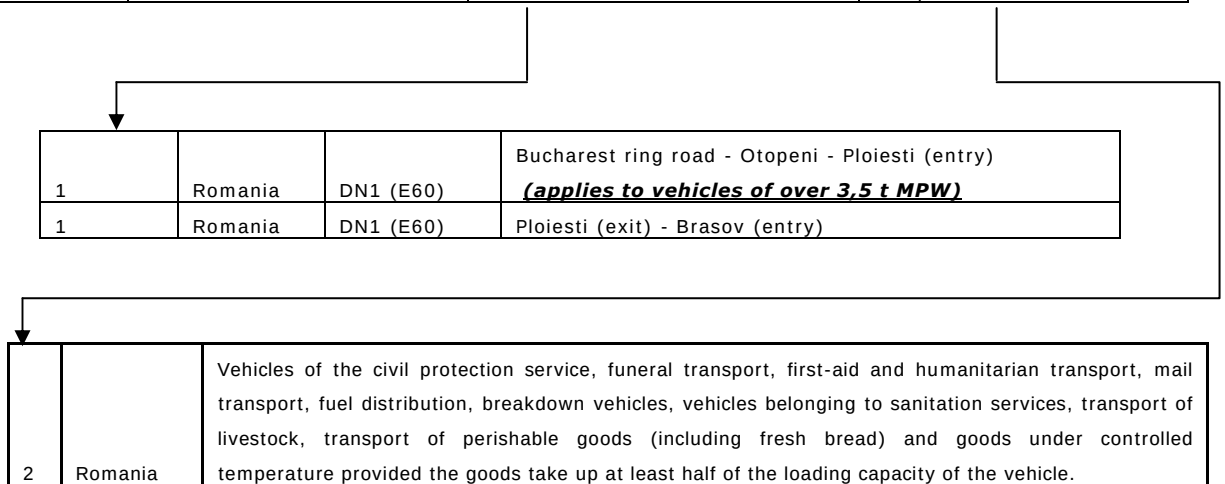
Table A.6 Number of international trips in 2007
(estimates on the basis of goods flows)

Origin	Destination				
	Spain	Sweden	Switzerland	United Kingdom	Total
Austria	18,533	541	73,684	11,966	1,499,980
Belgium	45,604	3,965	24,689	72,164	2,604,919
Bulgaria	4,249	446	729	2,843	168,138
Cyprus	3,210	141	47	4,759	25,339
Czech Rep.	12,259	1,733	10,803	7,719	1,665,812
Denmark	7,383	72,046	2,656	89,407	444,147
Estonia	489	12,444	236	50,721	168,966
Finland	34,381	16,124	3,252	105,342	346,142
France	581,591	2,475	246,866	274,113	3,866,740
Germany	156,725	64,843	348,850	218,456	6,569,230
Greece	2,860	913	213	29,010	174,202
Hungary	8,566	4,213	4,919	3,761	847,270
Ireland	10,364	2,755	3,694	102,225	179,736
Italy	176,512	3,774	154,850	115,772	2,301,565
Latvia	537	42,121	295	72,131	270,564
Lithuania	805	11,876	633	17,919	276,247
Luxembourg	2,090	148	516	4,252	190,941
Malta	228	1	11	587	7,233
Netherlands	47,539	18,280	29,492	153,504	2,302,281
Norway	3,501	137,988	382	622,096	836,811
Poland	24,235	23,752	12,415	33,669	1,446,173
Portugal	269,040	1,169	2,657	42,245	423,187
Romania	11,078	1,726	1,149	181	298,488
Slovakia	4,469	798	2,714	2,490	904,202
Slovenia	2,651	85	1,875	69	295,841
Spain		4,440	12,105	242,481	1,457,965
Sweden	9,018		64	266,687	684,348
Switzerland	5,664	7		1,186	483,989
UK	265,200	112,518	1,681		1,907,625
Total	1,708,781	541,319	941,479	2,547,755	32,648,081

Annex 3 NEA Restrictions Database (selection)

Day Nr	Day	Calendar day	Category	Country	From	To
233	Saturday	30-01-2010	Day (miscellaneous)	Romania	6:00	22:00
246	Sunday	31-01-2010	Day (miscellaneous)	Romania	6:00	22:00

Day Nr	Trucks weight of (tons)	Network	Exceptions
233	7.5	Limited network Romania 1	Exceptions Romania 2
246	7.5	Limited network Romania 1	Exceptions Romania 2



Annex 4 Cost Calculation Fact Sheet

Table A.1

Non-specialized transport, Italy-Netherlands
(excl. costs of overnight stay of drivers)
(excl. direct costs of road tolls and taxes)

Vehicle type		Tractor		Semi-trailer			
Kilometrage per year:		151,000					
Working hours per year:		2,935					

Fixed costs per year		tractor		Semi-trailer	Vehicle combination	% share	
Depreciation				3,373	3,373	1.9	
Road tax		760			760	0.4	
Vignettes		1,250			1,250	0.7	
Interests		2,440		1,088	3,528	2.0	
Insurances		4,524		454	4,978	2.8	
Other fixed vehicle costs		132			132	0.1	
		9,106		4,914	14,020	7.8	
Costs of spare equipment					546	0.3	

Variable costs per km		tractor		Semi-trailer			
Depreciation		0,0868	13,107			13,107	7.3
Tires		0,0129	1,944	0,0120	1,814	3,758	2.1
Fuel		0,2894	43,699			43,699	24.4
Repair & maintenance		0,0484	7,310	0,0212	3,201	10,511	5.9
		0,4375	66,060	0,0332	5,015	71,075	39.6

Direct transport costs				790		0.4	
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Costs of drivers							
Salaries incl. social burdens		24,02				70,499	39.3
Other costs		0,46				1,338	0.7
		28,00				71,837	40.0

Total direct costs				158,267		88.2	
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Overhead (%)							
Salaries incl. social burdens		6.68%				10,572	5.9
Accommodation costs		2.67%				4,226	2.4
Other costs		4.01%				6,347	3.5
		13.36%				21,145	11.8

TOTAL COSTS				179,412		100.0	
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COSTS PER KM				1.19			
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COSTS PER HOUR				62.19			
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Table A.2

Non-specialized transport, Poland-Netherlands
(excl. costs of overnight stay of drivers)
(excl. direct costs of road tolls and taxes)

Vehicle type		Tractor		Semi-trailer			
Kilometrage per year:		125,000					
Working hours per year:		3,030					

Fixed costs per year		tractor		Semi-trailer	Vehicle combination	% share	
Depreciation				2,810	2,810	1.7	
Road tax		760			760	0.4	
Vignettes		1,250			1,250	0.7	
Interests		2,440		1,088	3,528	2.1	
Insurances		4,286		423	4,709	2.8	
Other fixed vehicle costs		132			132	0.1	
		8,868		4,321	13,189	7.8	
Costs of spare equipment					480	0.3	

Variable costs per km		tractor		Semi-trailer			
Depreciation		0.0899	11,238			11,238	6.6
Tires		0.0152	1,900	0.0143	1,788	3,688	2.2
Fuel		0.2890	36,125			36,125	21.3
Repair & maintenance		0.0484	6,050	0.0212	2,650	8,700	5.1
		0.4425	55,313	0.0355	4,438	59,750	35.3

Direct transport costs				790		0.5	
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Costs of drivers							
Salaries incl. social burdens		24.10				73,023	43.1
Other costs		0.46				1,381	0.8
		24.56				74,404	43.9

Total direct costs				148,613		87.7	
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Overhead (%)							
Salaries incl. social burdens		7.01%				10,418	6.1
Accommodation costs		2.81%				4,176	2.5
Other costs		4.21%				6,257	3.7
		14.03%				20,850	12.3

TOTAL COSTS				169,464		100.0	
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COSTS PER KM				1.36			
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COSTS PER HOUR				56.87			
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Table A.3

Non-specialized transport, Spain-Netherlands
(excl. costs of overnight stay of drivers)
(excl. direct costs of road tolls and taxes)

Vehicle type		Tractor		Semi-trailer	
Kilometrage per year:		180,000			
Working hours per year:		3,050			

Fixed costs per year	tractor		Semi-trailer	Vehicle combination	% share
Depreciation			3,001	3,001	1.5
Road tax	760			760	0.4
Vignettes	1,250			1,250	0.6
Interests	3,019		979	3,928	2.0
Insurances	4,870		359	5,229	2.6
Other fixed vehicle costs	132			132	0.1
	10,031		4,339	14,370	7.3
Costs of spare equipment				482	0.2

Variable costs per km	tractor		Semi-trailer			
Depreciation	0.0896	16,128			16,128	8.2
Tires	0.0166	2,988	0,0129	2,322	5,310	2.7
Fuel	0.2768	49,824			49,824	25.2
Repair & maintenance	0.0536	9,648	0,0215	3,870	13,418	6.8
	0.4366	75,588	0,0344	6,192	84,780	42.9

Direct transport costs					790	0.4
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Costs of drivers						
Salaries incl. social burdens	24.10				73,505	37.2
Other costs	0.46				1,390	0.7
	24.56				74,895	37.9

Total direct costs					175,317	88.6
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Overhead (%)						
Salaries incl. social burdens	6.68%				11,308	5.7
Accommodation costs	2.67%				4,523	2.3
Other costs	4.01%				6,662	3.4
	13.36%				22,493	11.4

TOTAL COSTS					197,810	100.0
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COSTS PER KM					1.07	
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COSTS PER HOUR					64.01	
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Annex 5 Examples

Example 1: Only national language

Below an example has been presented of (the first section of) an official communication on driving restrictions by a legislative institute (Spain-Catalonia). This restriction has caught a British transport operator by surprise as the information has only been communicated in Spanish and the company was not aware of it. The operator in turn mentioned the event to his national road haulier organisation RHA, which in turn contacted IRU.



I. DISPOSICIONES GENERALES

COMUNIDAD AUTÓNOMA DE CATALUÑA

2097 *Resolución IRP/77/2010, de 19 de enero, por la que se establecen medidas de regulación de la circulación y del transporte de mercancías por las carreteras de Cataluña para el 2010.*

El Servicio Catalán de Tráfico, organismo autónomo de carácter administrativo creado por la Ley 14/1997, de 24 de diciembre, y adscrito al Departamento de Interior, de acuerdo con lo que dispone el artículo 4.4 del Decreto 243/2007, de 6 de noviembre, de estructura del Departamento de Interior, Relaciones Institucionales y Participación, tiene atribuidas, conjuntamente con otros órganos del Departamento, las funciones de gestión y control del tráfico en las vías interurbanas y en las travesías o vías urbanas que afecten a la circulación interurbana, así como la adopción de las medidas necesarias para garantizar la seguridad y la fluidez del tráfico de las carreteras.

De conformidad con lo que establecen el artículo 16 del Texto articulado de la Ley sobre tráfico, circulación de vehículos de motor y seguridad vial, aprobado por el Real decreto legislativo 339/1990, de 2 de marzo, y los artículos 37 y 39 del Reglamento general de circulación, aprobado por el Real decreto 1428/2003, de 21 de noviembre, en el establecimiento de restricciones temporales o permanentes a la circulación de vehículos en determinados itinerarios de vías interurbanas e incluso de vías urbanas o travesías.

Estas restricciones, que afectan a determinados vehículos tanto por razón de sus características técnicas como por su carga, se dictan con la finalidad, por una parte, de

Source: IRU

Example 2: "Sudden"-driving restriction

Example of a "sudden" driving restriction with severe implications for international transport operations.

"Owing to an important difference in atmospheric pressure between France and Italy, the Mont Blanc tunnel is closed to all heavy vehicles over 7.5t until further notice. As an alternative route, these vehicles may use the Fréjus Tunnel or drive through Vintimille.

Members will be notified when this restriction comes to an end.

En raison d'une importante différence de pression atmosphérique entre la France et l'Italie, le tunnel du Mont-blanc est fermé aux poids lourds de plus de 7.5t jusqu'à nouvel ordre. En guise d'itinéraires alternatifs, ces véhicules peuvent utiliser le tunnel du Fréjus ou passer par Vintimille.

Nous informerons nos membres dès la fin de l'interdiction.

IRU Information Centre
International Road Transport Union (IRU)
3, rue de Varembé/B.P. 44
CH - 1211 Geneva 20
Switzerland"

Example 3: Short time between communication and effectuation

Example of limited time duration between the official communication of the specifics of driving restriction and the actual commencement of the restriction. The driving ban concerns the Easter driving restrictions in Tyrol, Austria. These restrictions were published on 29 March in the Austrian Official Journal (“Bundesgesetzblatt”) and meant to be enforced on 2 and 3 April 2010. This left very little time for dissemination of the information to the national members of the IRU and for translation into national languages.

BUNDESGESETZBLATT

FÜR DIE REPUBLIK ÖSTERREICH

Jahrgang 2010	Ausgegeben am 29. März 2010	Teil II
101. Verordnung: Fahrverbotskalender 2010		

101. Verordnung der Bundesministerin für Verkehr, Innovation und Technologie, mit der für bestimmte Straßen ein Fahrverbot für Lastkraftfahrzeuge verfügt wird (Fahrverbotskalender 2010)

Auf Grund des § 42 Abs. 5 Straßenverkehrsordnung 1960, BGBl. Nr. 159, zuletzt geändert durch BGBl. I Nr. 93/2009, wird verordnet:

§ 1. Das Fahren mit Lastkraftwagen oder Sattelkraftfahrzeugen mit einem höchsten zulässigen Gesamtgewicht von mehr als 7,5 t und von Lastkraftwagen mit Anhängern, bei denen die Summe der höchsten zulässigen Gesamtgewichte beider Fahrzeuge mehr als 7,5 t beträgt, ist

1. am 3. April 2010 von 10 bis 15 Uhr, am 2. Juni 2010 von 9 bis 24 Uhr und am 24. Dezember 2010 von 10 bis 22 Uhr auf der Inntalautobahn A 12 und Brennerautobahn A 13, wenn das Ziel der Fahrt in Italien oder in einem Land liegt, das über Italien erreicht werden soll;
2. an allen Samstagen vom 3. Juli 2010 bis einschließlich 28. August 2010 in der Zeit von 9 bis 15 Uhr, wenn das Ziel der Fahrt in Italien oder in einem Land liegt, das über Italien erreicht werden soll und am 2. April 2010 in der Zeit von 0 bis 22 Uhr, wenn das Ziel der Fahrt in Deutschland liegt oder über Deutschland erreicht werden soll, auf der Inntalautobahn A 12 und auf der Brennerautobahn A 13;
3. an allen Samstagen vom 3. Juli 2010 bis einschließlich 28. August 2010 in der Zeit von 8 bis 15 Uhr außerhalb des Ortsgebietes in beiden Fahrtrichtungen auf der