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1. Introduction

1.1. Background

The Trans European Road Network (TERN) is a network of roads in Europe that is comparable to the E-number network. A subgroup composed of several European Road Directorates (SG-TERN members) is responsible for issues related to this network.

1.2. Aim of the study

The aim of this study is the identification of performance indicators for this European network, based on interviews with road users, who are asked to evaluate the network of a country they have just visited (most recent experience on their last trip) as well as the network of their own native country.

The evaluation of both networks is done in one questionnaire, *however a direct comparison between the two networks is not the aim of this study*. The overall graphics, showing all countries, are used to improve the readability of the report.¹

This study includes the following 'native' countries:

- Belgium (Flanders)
- Belgium (Walloon)
- Denmark
- England
- France
- Ireland
- Luxembourg
- Netherlands
- Switzerland

The Belgian part of the study (Flanders) included drivers from Belgium and France. The other Belgian part (Walloon) included drivers from Belgium and Germany. Table 1.1 gives a complete list of participating countries and the nationality of the drivers included.

¹ The participating countries were given the opportunity to explain their policy and/or national road user survey results related to the results of ERUS. These can be found in the appendix of this report.

Table 1.1 Drivers included per participating country

Nationality of the drivers	Participating country								
	Belgium (Flanders)	Belgium (Wallonia)	Denmark	England	France	Ireland	Luxembourg	Netherlands	Switzerland
Belgium	x	x			x		x	x	
Denmark			x						
England				x	x	x		x	
France	x			x	x		x		
Germany		x	x		x		x	x	x
Ireland				x	x	x			
Italy					x				x
Luxembourg							x		
Netherlands								x	
Spain					x				
Sweden			x						
Switzerland					x				x

The international study was co-ordinated by the Dutch Road Directorate (in particular the AVV Transport Research Centre) and the Dutch research agency I&O Research. Each national Road Directorate defined the bordering countries to be included and they commissioned local research agencies to conduct the fieldwork in their countries.

In order that the results were comparable in all countries, all parties involved were asked to ensure that field instructions, questionnaire, coding and data entry were in accordance with the instructions outlined in a Handbook. The participants could access this Handbook at www.erus.nl, the project's website.

The English-language 'master' questionnaire was slightly modified from the questionnaire that had previously been tested by the Dutch Road Directorate/SG-TERN members. The main subjects in the questionnaire are:

- Satisfaction with road travel
- Traffic information and delays
- Traffic safety

The Dutch research agency I&O Research, in close consultation with the Dutch Road Directorate, handled the development of code frame, the data analysis and the reporting.

1.3. Method

As the main objective is to gather information on the most recent experience, the fieldwork was conducted at the first rest area near the border. At each border half the interviews were held with drivers of the native country and half with drivers from the bordering country. At every border interviews were held with the drivers of coaches, lorries and cars. Each driver was interviewed about the road network they had just used. They also had to evaluate their own national network from memory.

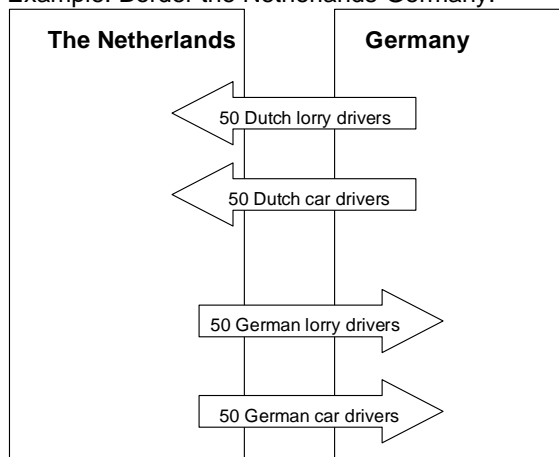
If the Netherlands are taken as an example - at the Dutch-German border, for instance - the following activities would have taken place: German drivers coming from the Netherlands would be asked to evaluate the Dutch network as well the German network. Dutch drivers coming from Germany would be asked to evaluate the German network as well as their own, Dutch network.

Per border 200 persons were interviewed (n = 200, see figure 1.1):

- Per border 100 lorry/coach drivers were interviewed. 50 lorry/coach drivers from country A and 50 lorry/coach drivers from country B.
- Per border 100 car drivers were interviewed. Once again, 50 car drivers from country A and 50 car drivers from country B.

Figure 1.1

Example: Border the Netherlands-Germany.



All operational details are discussed in the Handbook, which includes a detailed description of the organisation, handling of translations and checks, fieldwork, coding and data processing. All necessary documents that were needed during this project were available at www.erus.nl. There is also a cd-rom with all documents available.

Fieldwork

The actual fieldwork was conducted at 19 borders (table 1.2). A total of almost 3,900 road users were interviewed. Some participating countries did not manage to conduct the complete fieldwork of 200 interviews per border for reasons including insufficient traffic. The fieldwork period was from 23 August till 19 September.

Table 1.2

Number of respondents per border.

border	lorry drivers	car drivers	total
Belgium -Germany	101	100	201
Denmark-Sweden	100	100	200
Denmark-Germany	100	100	200
England-Ireland	207	178	385
France-England	104	103	207
France-Spain	199	205	404
France-Italy	95	108	203
France-Belgium	101	101	202
France-Germany	101	98	199
France-Switzerland	101	-	101
France-Luxembourg	63	58	121
France-Ireland	26	141	167
Luxembourg-Germany	75	85	160
Luxembourg-Belgium	59	63	122
Netherlands-Germany	104	100	204
Netherlands-Belgium	101	99	200
Netherlands-England	109	96	205
Switzerland-Germany	106	105	211
Switzerland-Italy	91	111	202
total	1,943	1,951	3,894

At the beginning of the chapters with the results per country there is a table with the number of respondents on which the results are based. In general we are 95% sure that the found percentage does not deviate more than 7 percent. For the results of the satisfaction and importance of the aspects of the national road networks we are 95% sure that the found percentage does not deviate more than 5 percent.

Table 1.3 shows for the organising countries on which locations/border the fieldwork took place.

Table 1.3 Locations fieldwork.

organising country	border	location
Belgium (Wallon)	Belgium -Germany	A3/E40 / A27/E42
Belgium (Flanders)	France-Belgium	E17 near Kortrijk
Denmark	Denmark-Sweden	ferry E47/E55, Elsinore/Helsingborg
	Denmark-Germany	ferry E47, Rødbyhavn/Puttgarden
France	France-England	A13 (Le Havre - ferry)
	France-Spain	A63 (Biarritz - Atlantique) / A9 (Le Perthus - Méditerranée)
	France-Italy	A8 (Vintimille - Turbie)
	France-Belgium	A2 Valenciennes
	France-Germany	A320 (Saarbrücken)
	France-Switzerland	A35 (Bâle - Saint Louis) / A1 (Bardonnex)
	France-Ireland	Route Départementale N58 (Roskoff - ferry)
England	England-Ireland	Liverpool ferry terminal/ Dublin ferry terminal
	France-England	Dover ferry terminal
Luxembourg	France-Luxembourg	A3/E25
	Luxembourg-Germany	A1
	Luxembourg-Belgium	A6/E25
Ireland	England-Ireland	port Dublin/Holeyhead
Netherlands	Netherlands-Germany	A1/E30 near Oldenzaal
	Netherlands-Belgium	A16/E19 Breda/Hazeldonk, A67/E34 near Eindhoven
	Netherlands-England	ferry Hoek van Holland-Harwich
Switzerland	Switzerland-Germany	A2/E35 Basel/Weil am Rhein
	Switzerland-Italy	A2/E35, near Chiasso

1.4. Outline

Chapter two describes the background information on the drivers (e.g. age, gender, and nationality). Chapter three discusses the most important results for the participating countries, comparing the countries according to the principal indicators. The subsequent chapters 4 - 11 present the individual results for each participating country. In these chapters the results are compared with the neighbouring countries only. Chapter 12 deals with the results from the countries that did not participate in the European Road User Survey 2004 (Germany, Italy, Spain and Sweden).

2. Background information on the drivers

This chapter describes the background information on the drivers involved in the European Road User Survey 2004. The information collected from each driver covers the following data:

- age;
- gender;
- nationality;
- frequency of driving on the networks of both countries;
- mileage per year driven on TERN network;
- type of vehicle;
- purpose of trip.

These aspects of the sample composition are presented in the following tables.

Age, gender and nationality of the drivers.

The drivers were asked about their age, gender and nationality. Table 2.1 shows the results of these questions.

Most of the drivers came from France (21 percent). Eight of the nineteen borders involved in this project run in part along French territory. Quite a number drivers also came from Germany (16 percent), Belgium and England (10 percent each).

More than half the drivers (58 percent) are between 30 and 49 years old. A third (30 percent) of the drivers are older than 50 years. The average age of the drivers varies from 41 years for the Italian drivers to 47 years for the Danish ones. Car drivers are a little older than lorry drivers, the average age of car drivers is this project being 45 years while the lorry drivers have an average age of 42 years.

Most of the drivers interviewed in this project are male (90 percent), the percentage remaining roughly the same among the drivers of different nationalities. Of the Irish drivers in the project, 17 percent are female. Grouped according to type of vehicle (lorry or car), most of the lorry drivers are male (98 percent). About a fifth of the car drivers are female.

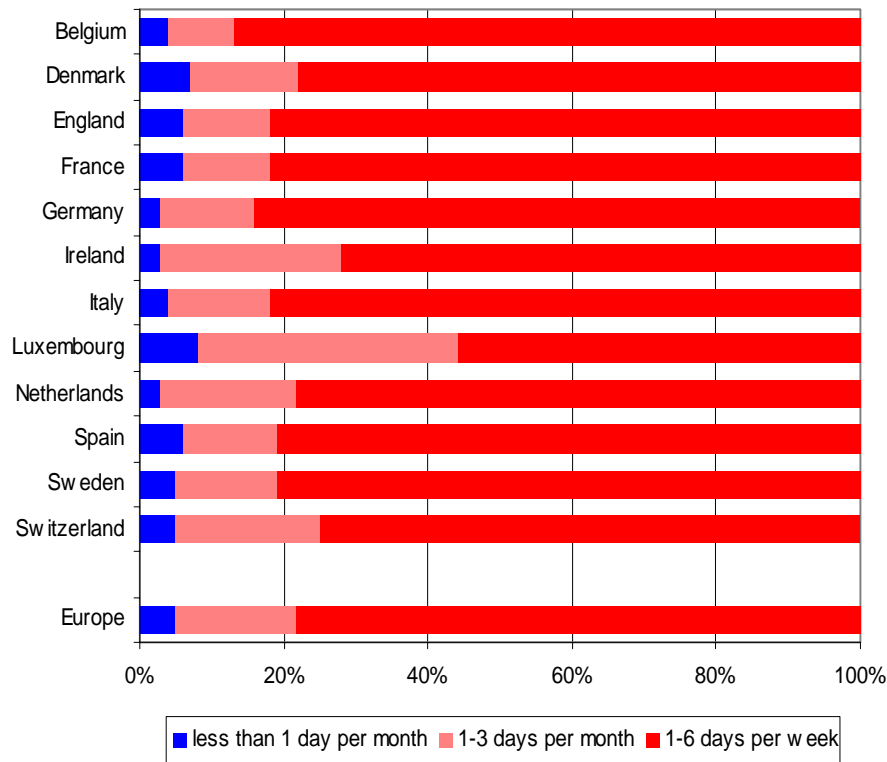
Table 2.1 Age, gender and nationality of the drivers (percentages).

	age			gender		nationality
	16-29	30-49	> 50	male	female	
Belgium	12	64	24	90	10	10
Denmark	8	52	41	89	11	5
England	7	58	35	88	12	10
France	15	56	30	91	9	21
Germany	10	58	32	89	11	16
Ireland	13	53	34	83	17	7
Italy	16	62	22	90	10	5
Luxembourg	14	64	23	86	14	3
Netherlands	13	59	28	94	6	8
Spain	13	60	27	92	8	5
Sweden	9	49	42	91	9	3
Switzerland	9	65	25	90	10	6
Europe	12	58	30	90	10	100

The drivers were asked how often they drive on the national road networks in a year. This question was asked for the driver's own country and the country he/she had just come from (neighbouring country). Figure 2.1 shows the results for the lorry drivers (lorry and car drivers could choose different answers).

On average more than three-quarters (78 percent) of the lorry drivers drive over the different national networks from one to six days per week. The exception to this average is Luxembourg. Half the lorry drivers (56 percent) drive one to six days per week in Luxembourg.

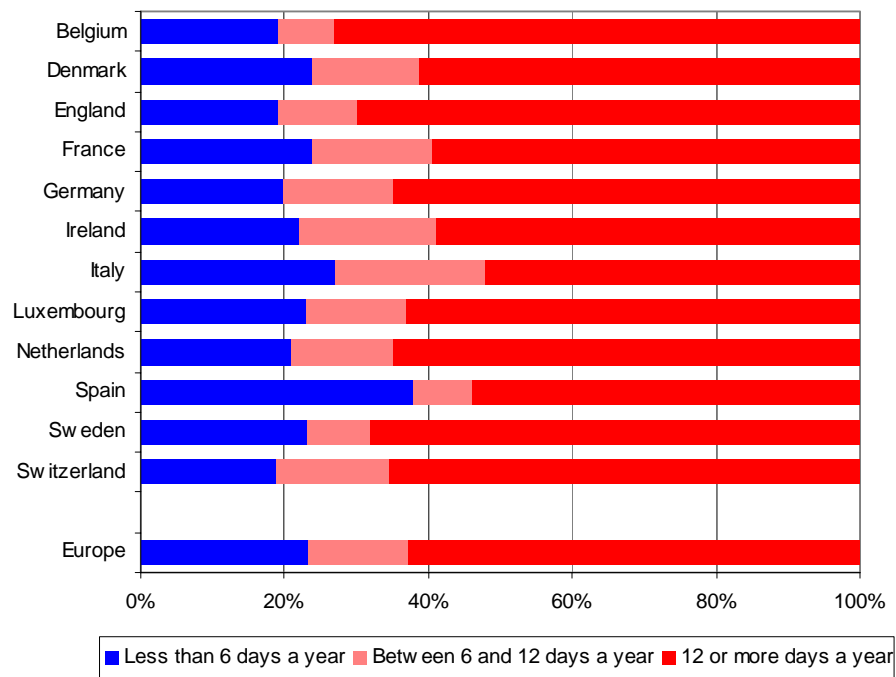
Figure 2.1 Frequency of usage of national road networks: Lorries (percentages).



Unlike the lorry drivers, the car drivers are not professional road users. The car drivers were asked if they drive up to six days a year, between six and twelve days a year or more than twelve days a year on the national road networks. Figure 2.2 shows the frequency of road use for the different national networks in this study.

Almost two thirds of the car drives (63 percent) drive over the national road networks for more than twelve days per year, the exception being Spain, where more than a third of the car drivers drive less than six days per year on the networks. On average, a fifth of the car drivers drive less than six days per year on the networks. Most of these drivers are foreign drivers. In general, more than 90 percent of the national drivers drive more than 12 days per year on their national road network.

Figure 2.2 Frequency of usage of road networks: cars (percentages).

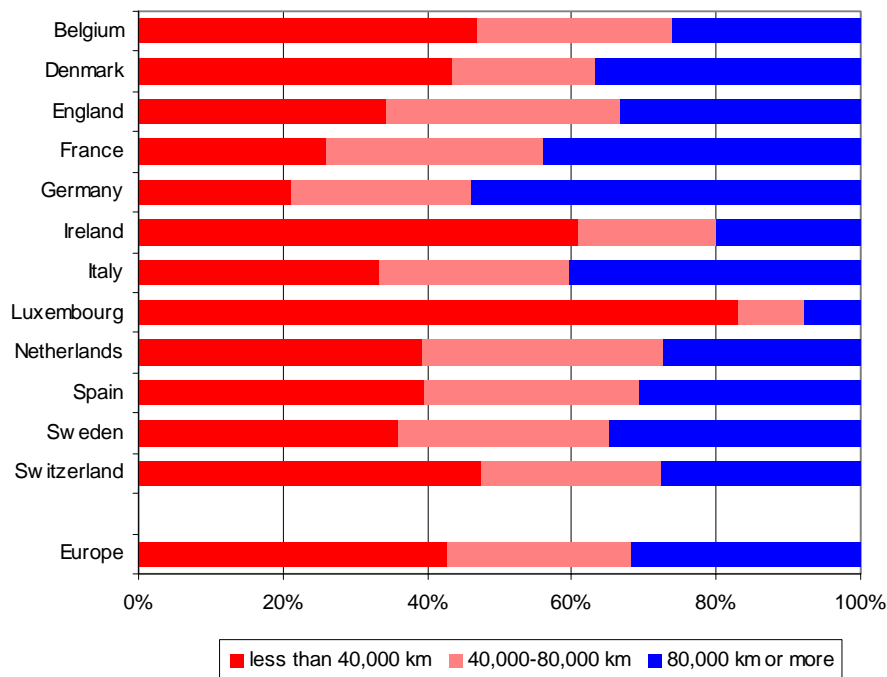


Mileage per year

After the question on frequency of road use, car and lorry drivers were asked how many kilometres/miles they drive per year. Lorry drivers were asked to specify the kilometres/miles for two networks (their own network and the network they had just come from). Car drivers were asked how many kilometres they drive in total.

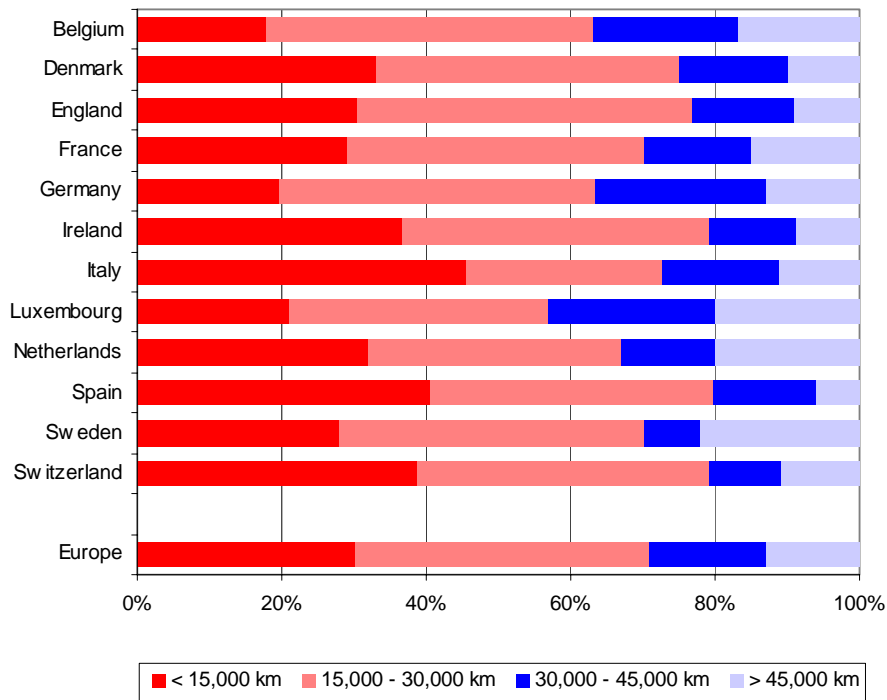
Figure 2.3 shows how many kilometres lorry drivers drive on the different national road networks. When analysing these results one should bear in mind that the study only included drivers crossing the border. Naturally Luxembourg, being the smallest country, shows the lowest number of kilometres driven internally (most of the drivers, 84 percent, drive less than 40,000 km per year in Luxembourg). On average 43 percent of the drivers of all nationalities included in this study cover up to 40,000 km per year. A quarter of the lorry drivers drive between 40,000 and 80,000 km per year on the networks. A third drive more than 80,000 km per year.

Figure 2.3 Number of kilometres driven per year per network: lorry drivers (percentages).



The car drivers were asked how many kilometres they drive annually on motorways. Figure 2.4 shows the results for the different nationalities involved in this study. On average most of the car drivers (41 percent) drive between 15,000 and 30,000 km per year on motorways. A third of the car drivers do not drive more than 15,000 km per year on motorways. On average 40 percent of the car drivers from Italy, Spain and Switzerland drive less than 15,000 km per year. Almost half the drivers from Luxembourg drive more than 30,000 km per year.

Figure 2.4 Number of kilometres driven per year: car drivers (percentages).



Type of vehicle and purpose of trip

The last 'background information' questions were about the type of vehicle and the purpose of the trip. Professional drivers were asked whether they drive a lorry or a coach. Car drivers were asked about the purpose of the trip. The results of both questions are shown in table 2.2.

Almost all the professional drivers are lorry drivers (95 percent). A small group of respondents (5 percent) were coach drivers. In England and Denmark about a tenth of the professional drivers are coach drivers.

The purpose of the trip for more than two thirds of the car drivers was leisure/holiday travel. About 25 percent of the car drivers were on a business trip. In France, Ireland, Italy and Spain, more than 85 percent of car drivers were on a leisure/holiday trip. Half the car drivers in Belgium were on a business trip.

Table 2.2 Type of vehicle and purpose of the trip (percentages).

	type of vehicle (lorry drivers)		purpose of trip (car drivers)		
	coach	lorry	leisure/holiday	business	other
Belgium	4	96	35	54	11
Denmark	9	91	51	29	20
England	9	91	80	15	5
France	6	94	86	12	3
Germany	3	97	59	33	8
Ireland	6	94	88	8	4
Italy	5	95	90	9	1
Luxembourg	7	93	53	42	5
Netherlands	7	93	65	30	5
Spain	5	95	95	4	1
Sweden	6	94	42	50	8
Switzerland	1	99	71	26	3
Europe	5	95	70	24	6

Conclusions

Most of the drivers involved in the European Road User Survey 2004 are male aged between 30 and 49 years. The drivers come from twelve countries, ranging from Sweden in the north to Spain and Italy in the south. Most of the lorry drivers drive on the different national networks on a weekly basis. Most of the car drivers drive more than once a month on the road networks involved.

Half the lorry drivers drive more than 40,000 km per year on the networks. Most of the car drivers drive between 15,000 and 30,000 km per year on motorways. Most of the professional drivers are lorry drivers and 70 percent of the car drivers are on holiday/leisure trips.

3. TERN network compared

3.1. Introduction

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

-
- visibility of markings on the road surface
 - understandable and clear direction signs
 - understandable and clear traffic signs
 - quality of the road surface
 - clear and understandable signing at road works
 - provision of lighting on major roads
 - availability of places to stop, such as service or rest areas
 - cleanliness of service or rest areas
 - security of places to stop.
 - availability of variable message signs along major motorways
 - cleanliness of the road
-

In this chapter the results for every element are shown in a figure. Each figure shows the results for the twelve countries involved in terms of the satisfaction (percentage satisfied and extremely satisfied) and the importance (percentage important and extremely important) of the aspect per country, sorted by the level of satisfaction. The European average is also shown in the figures to facilitate comparison and to see whether a country scores above or below the European TERN average. In general the national drivers are more satisfied than the foreigners. Same holds for car drivers. In general they are more satisfied with the several aspects of the networks than lorry drivers.

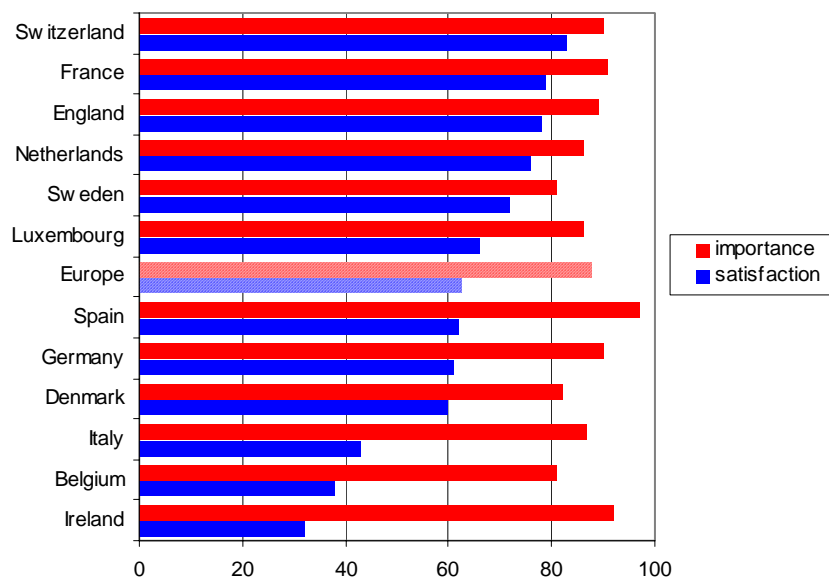
This chapter also shows the results for the questions about the use of traffic information and the results for the questions about (the cause) of delay.

3.2. TERN network compared

Visibility of markings on the road surface

In all the countries involved, more than 80 percent of the drivers on the national networks judge the visibility of markings on the road surface to be (very) important (figure 3.1). In Spain as many as 95 percent of the drivers are of the opinion that the visibility of markings is important. Swiss drivers are most satisfied with this aspect, followed by France, England and the Netherlands. The drivers on the Swedish and Luxembourg networks are also more satisfied than the European average of 63 percent.

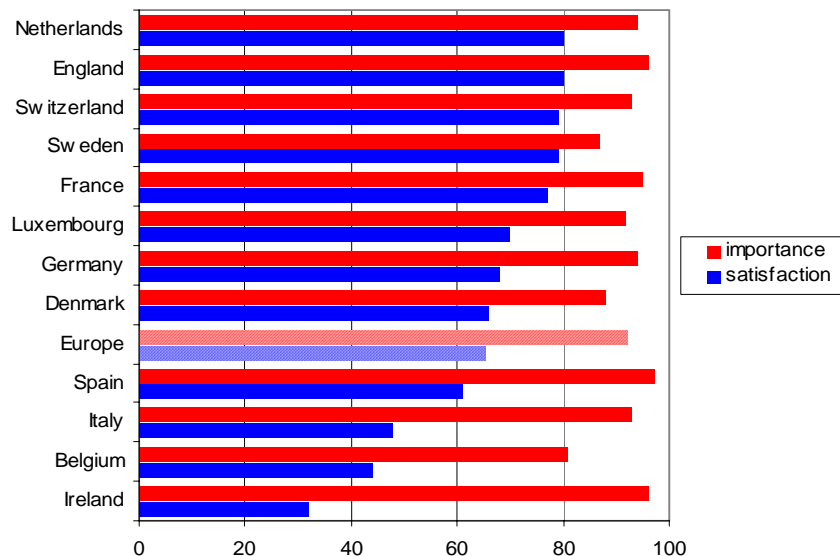
Figure 3.1 Scores on the visibility of markings on the road surface (percentages).



Understandable and clear direction signs

In all the countries involved, more than 80 percent of the drivers on the national networks judge understandable and clear direction signs to be (very) important (figure 3.2). Dutch drivers are most satisfied with this aspect, followed by England, Switzerland and Sweden. The drivers on the French, Luxembourg and German networks are also more satisfied than the European average of 65 percent. In Italy, Belgium and Ireland less than half the drivers are satisfied with the understandability and clarity of the direction signs.

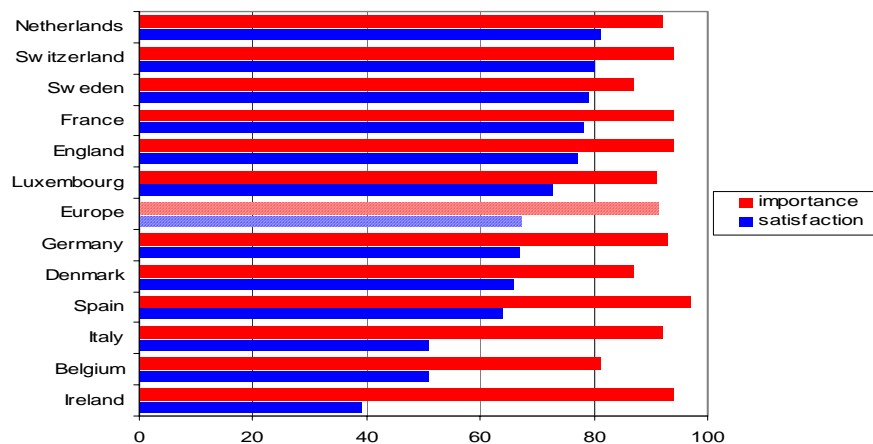
Figure 3.2 Scores on understandable and clear direction signs (percentages).



Understandable and clear traffic signs

In most of the countries involved, more than 90 percent of the drivers on the national networks judge understandable and clear traffic signs to be (very) important (figure 3.3). In Denmark and Sweden 87 percent of the drivers judge this aspect to be (very) important. Drivers on the Dutch network are most satisfied with this aspect, followed by Switzerland. In these two countries more than 80 percent of the drivers are satisfied that the traffic signs are understandable and clear. In Italy, Belgium and Ireland half the drivers or fewer are satisfied with this aspect. On average, 67 percent of the drivers are satisfied with the understandability and clarity of traffic signs in Europe.

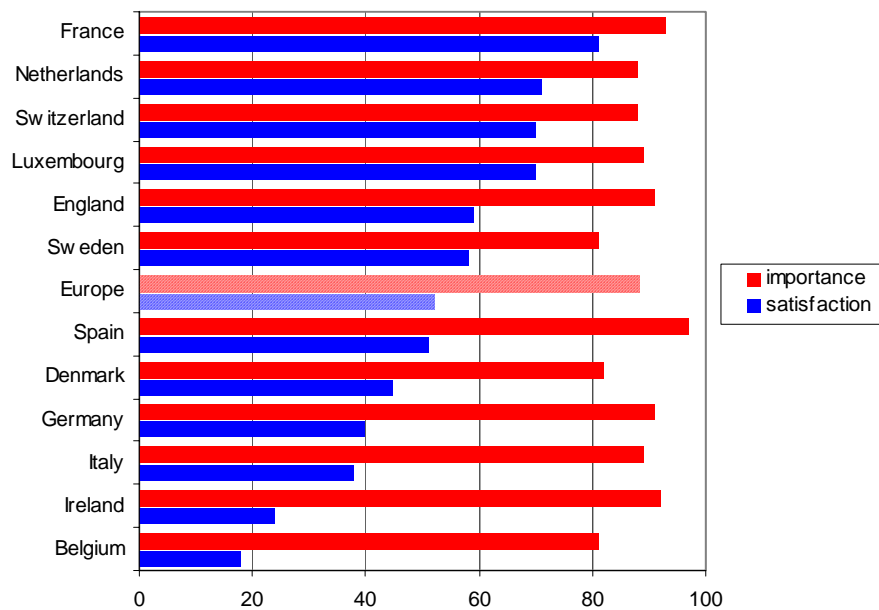
Figure 3.3: Scores on understandable and clear traffic signs (percentages).



Quality of the road surface

The quality of the road surface is important to 80 percent of the drivers on the different national TERN road networks (figure 3.4). There are great differences in the level of satisfaction with this aspect. More than 80 percent of the users of the French network judge the quality of the road surface in France to be satisfactory. In the Netherlands, Switzerland and Luxembourg, too, most of the drivers (around 70 percent) are satisfied. Fewer drivers (less than the European average) in Spain, Denmark, Germany, Italy, Ireland and Belgium are satisfied with the quality of the road surface.

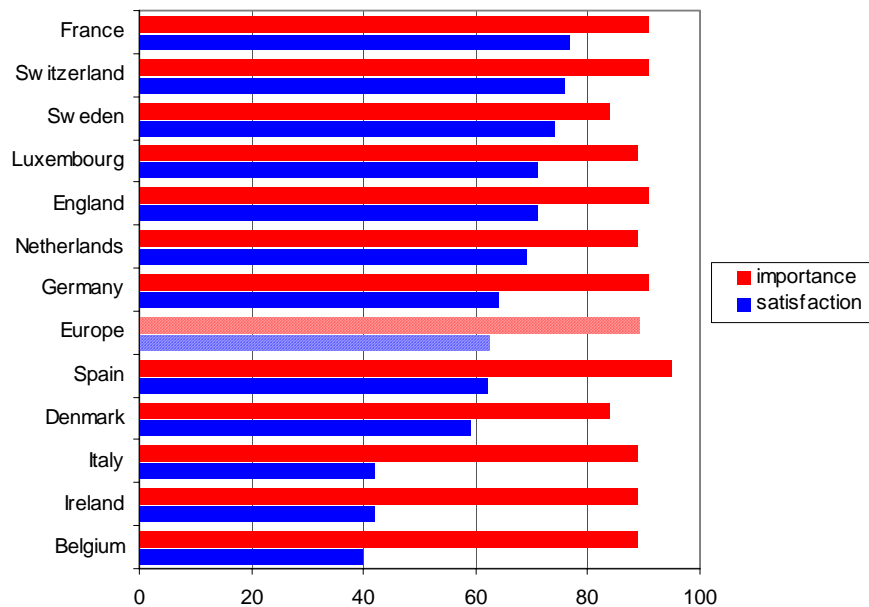
Figure 3.4 Scores on quality of the road surface (percentages).



Clear and understandable signing at road works

In all the countries involved, more than 80 percent of the drivers on the national networks judge clear and understandable signing at road works to be (very) important (figure 3.5). In Spain as many as 95 percent of the drivers are of the opinion that clear and understandable signing at road works is important. Drivers on the French network are most satisfied with this aspect, followed by Switzerland and Sweden. The drivers on the Luxembourg, English, Dutch and German network are also more satisfied than the European average of 62 percent. In Italy, Ireland and Belgium 40 percent of the drivers are satisfied with signing at road works.

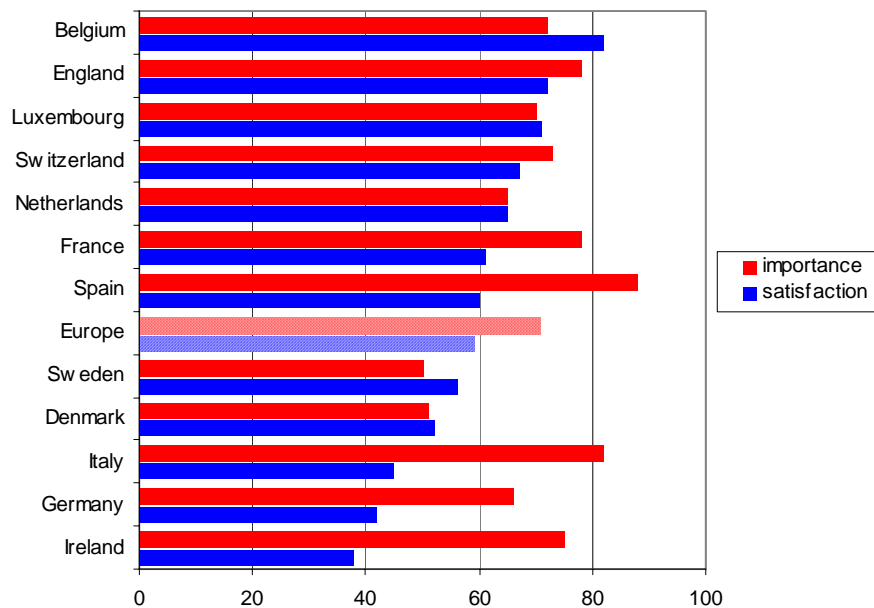
Figure 3.5 Scores on clear and understandable signing at road works (percentages).



Provision of lighting on major roads

In all the countries involved, around 70 percent of the drivers on the national networks judge the provision of lighting on major roads no be (very) important (figure 3.6). Belgian drivers are most satisfied with this aspect, followed by England and Luxembourg. Drivers on the Swedish, Danish, Italian, German and Irish network are less satisfied than the European average of 59 percent.

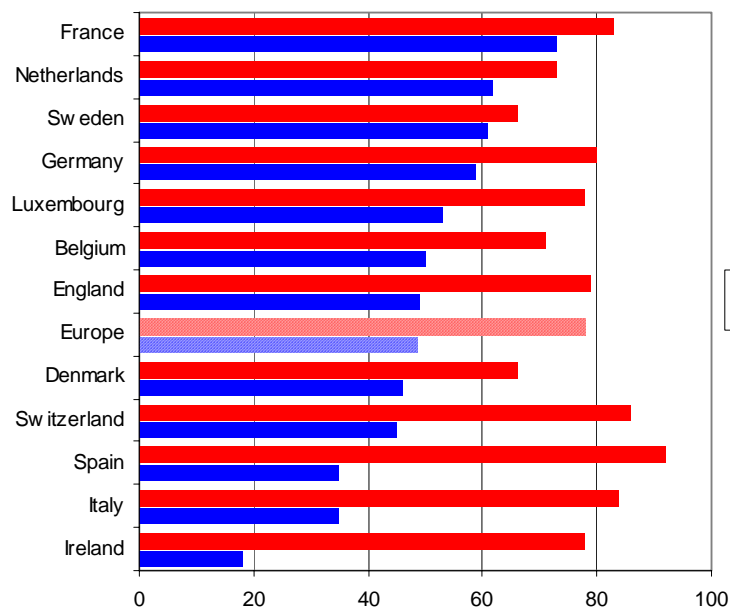
Figure 3.6 Scores on provision of lighting on major roads (percentages).



Availability of places to stop, such as service or rest areas

In most of the countries involved, around 80 percent of the drivers on the national networks judge the availability of places to stop to be (very) important (figure 3.7). In Denmark and Sweden 66 percent of the drivers judge this aspect to be (very) important. Drivers on the French network are most satisfied with this aspect, followed by the Netherlands and Sweden. In these countries more than 60 percent of the drivers are satisfied with the availability of places to stop. In England, Denmark, Switzerland, Spain, Italy and Ireland fewer than half the drivers are satisfied with the availability of places to stop, such as service or rest areas. On average, 49 percent of the drivers are satisfied with this aspect.

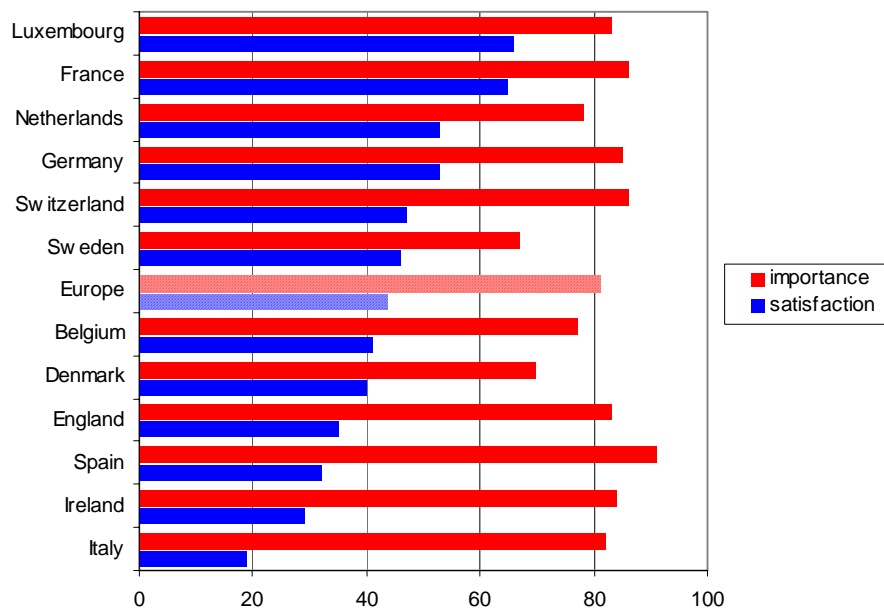
Figure 3.7 Scores on availability of places to stop, such as service or rest areas (percentages).



Cleanliness of service or rest areas

The cleanliness of service or rest areas is important to 80 percent of the drivers on the different national TERN road networks (figure 3.8). In Sweden and Denmark around 70 percent of the drivers are of the opinion that the cleanliness of service or rest areas is important. In Luxembourg and France most of the drivers (two thirds) are satisfied with the cleanliness of service or rest areas. On average fewer than half the drivers on the TERN network are satisfied with this aspect. In Spain, Ireland and Italy fewer than one third are satisfied with the cleanliness of service or rest areas.

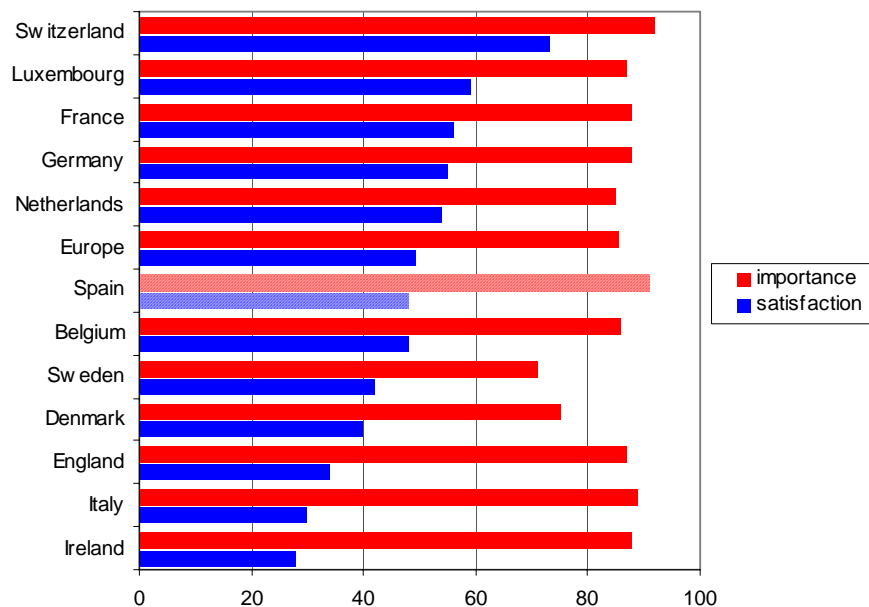
Figure 3.8 Scores on cleanliness of service or rest areas (percentages).



Security of places to stop

In all the countries involved, more than 80 percent of the drivers on the national networks judge the security of places to stop to be (very) important (figure 3.9). Drivers on the Swiss network are most satisfied with this aspect. Three quarters of the drivers on the Swiss network are satisfied about the security of places to stop in Switzerland. In the other countries fewer than 60 percent are satisfied with the security of places to stop. In Belgium, Sweden, Denmark, England, Italy and Ireland, drivers are less satisfied than the European average of 49 percent.

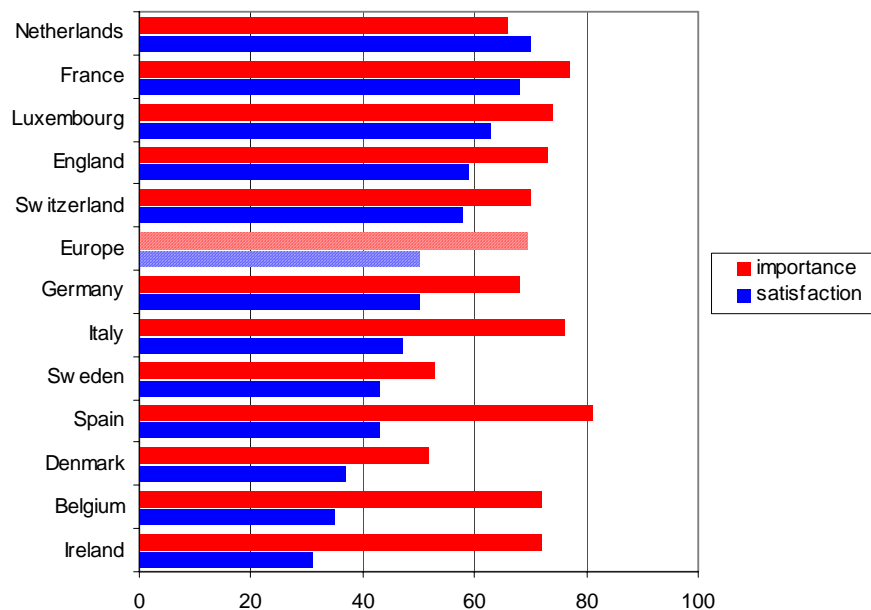
Figure 3.9 Scores on security of places to stop (percentages).



Availability of variable message signs along major motorways

On average around 70 percent of the drivers on the national networks judge the availability of variable message signs along major motorways to be important (figure 3.10). In Sweden and Denmark half the drivers are of the opinion that the availability of message signs along major motorways is important. Dutch drivers are most satisfied with this aspect, followed by France and Luxembourg. A maximum of 40 percent of the drivers on the Danish, Belgian and Irish network are satisfied with the availability of variable message signs along major motorways.

Figure 3.10 Scores on availability of variable message signs along major motorways (percentages).



Cleanliness of the road

The quality of the road surface is important to 75 percent of the drivers on the different national TERN road networks (figure 3.11). In Sweden and Denmark around 60 percent of the drivers are of the opinion that the cleanliness of the road is important. In Switzerland and France most of the drivers (80 percent) are satisfied with the cleanliness of the road. On average two thirds of the drivers on the TERN networks are satisfied with this aspect. In Italy, Ireland and Belgium fewer than half the drivers are satisfied with the cleanliness of the road.

Figure 3.11 Scores on cleanliness of the road (percentages).

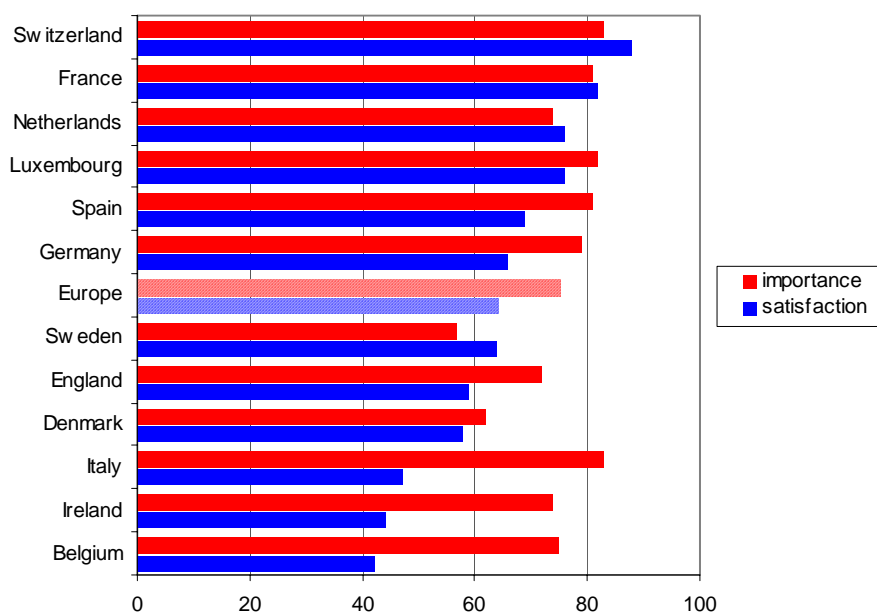


Table 3.1 summarises the findings presented in chapter three, showing the ranking of the countries according to the satisfaction of the different aspects of the networks.

Table 3.1 Satisfaction of aspects of the TERN network: ranking.

	Bel	Den	Eng	Fr	Ger	Ire	It	Lux	Net	Sp	Swe	Swi
visibility of markings on the road surface	11	9	3	2	8	12	10	6	4	7	5	1
understandable and clear direction signs	11	8	2	5	7	12	10	6	1	9	4	3
understandable and clear traffic signs	11	8	5	4	7	12	10	6	1	9	3	2
quality of the road surface	12	8	5	1	9	11	10	4	2	7	6	3
clear and understandable signing at road works	12	9	5	1	7	11	10	4	6	8	3	2
provision of lighting on major roads	1	9	2	6	11	12	10	3	5	7	8	4
availability of places to stop	6	8	7	1	4	12	11	5	2	10	3	9
cleanliness of service or rest areas	7	8	9	2	4	11	12	1	3	10	6	5
security of places to stop.	7	9	10	3	4	12	11	2	5	6	8	1
availability of var. message signs along motorw.	11	10	4	2	6	12	7	3	1	9	8	5
cleanliness of the road	12	9	8	2	6	11	10	4	3	5	7	1

Traffic information

About 72 percent of the drivers in Europe planned their trip. In Ireland 83 percent of the drivers planned their trip. About one third of the drivers on the networks shown used pre-trip traffic information. In Sweden 13 percent used pre-trip traffic information. Drivers on the network shown often said that the pre-trip information was reliable. The same holds for the usefulness of pre-trip traffic information. In all countries, except for Belgium, more than 80 percent of the drivers judge pre-trip traffic information reliable and useful. About a third use on-trip traffic information (49 percent in Switzerland). Most of the drivers (80 percent or more) judge the on-trip traffic information provided to be reliable and useful.

Table 3.2 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre-trip				on-trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Belgium	68	37	73	74	29	87	73
Denmark	75	34	80	82	27	77	74
England	67	27	87	88	29	87	85
France	76	35	91	91	29	93	93
Germany	73	32	85	82	35	85	81
Ireland	83	28	93	97	25	95	97
Italy	74	43	84	85	39	88	77
Luxembourg	77	38	88	92	26	88	96
Netherlands	76	27	89	91	42	90	80
Spain	51	39	92	95	11	95	100
Sweden	48	13	100	100	13	100	100
Switzerland	71	40	82	84	49	84	84
Europe	72	33	86	87	31	88	85

Delays

In response to the question whether they experienced delay and if so, what caused it, an average of 40 percent of the drivers did report delays (table 3.3). More than half the drivers who drove in Belgium and Luxembourg experienced delay. The most frequently reported causes of delays are congestion and road works. Especially in Belgium and Luxembourg many drivers experienced delay by road works. In the Netherlands and in Ireland congestion causes most of the delay.

Table 3.3 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
Belgium	51	52	77	21	8	6
Denmark	24	75	52	19	15	2
England	48	56	45	18	14	12
France	27	60	29	23	10	11
Germany	47	56	65	22	11	13
Ireland	49	68	62	8	21	13
Italy	40	72	39	22	4	10
Luxembourg	52	51	71	18	5	3
Netherlands	42	70	47	10	4	1
Spain	27	56	16	19	2	19
Sweden	22	50	41	14	9	9
Switzerland	43	58	56	19	5	12
Europe	40	59	53	18	9	9

4. Belgium

4.1. Introduction

This chapter describes the results for Belgium, which are based on fieldwork conducted by Belgium (Walloon and Flanders), France, Luxembourg and the Netherlands. Table 4.1 shows the number of interviews per border and organising country.

Table 4.1 Number of interviews on which the results for Belgium are based.

border	organising country					total
	Belgium (Walloon)	Belgium (Flanders)	France	Luxembourg	Netherlands	
Belgium-Germany	201					201
France-Belgium		102	100			202
Luxembourg-Belgium				122		122
Netherlands-Belgium					200	200
total	201	102	100	122	200	725

This chapter describes the results for Belgium in three sections. Section 4.2 deals with satisfaction with road networks, section 4.3 is about the use of and satisfaction with traffic information, while safety is discussed in section 4.4. Both Flanders and Walloon executed fieldwork in Belgium. Though, in the questionnaires there was no difference between Walloon and Flanders. The results cannot be split up for both parts of Belgium. So this chapter describes the results for Belgium in general.

4.2. Satisfaction with Belgian network

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

- visibility of markings on the road surface
- understandable and clear direction signs
- understandable and clear traffic signs
- quality of the road surface
- clear and understandable signing at road works
- provision of lighting on major roads
- availability of places to stop, such as service or rest areas
- cleanliness of service or rest areas
- security of places to stop.
- availability of variable message signs along major motorways
- cleanliness of the road

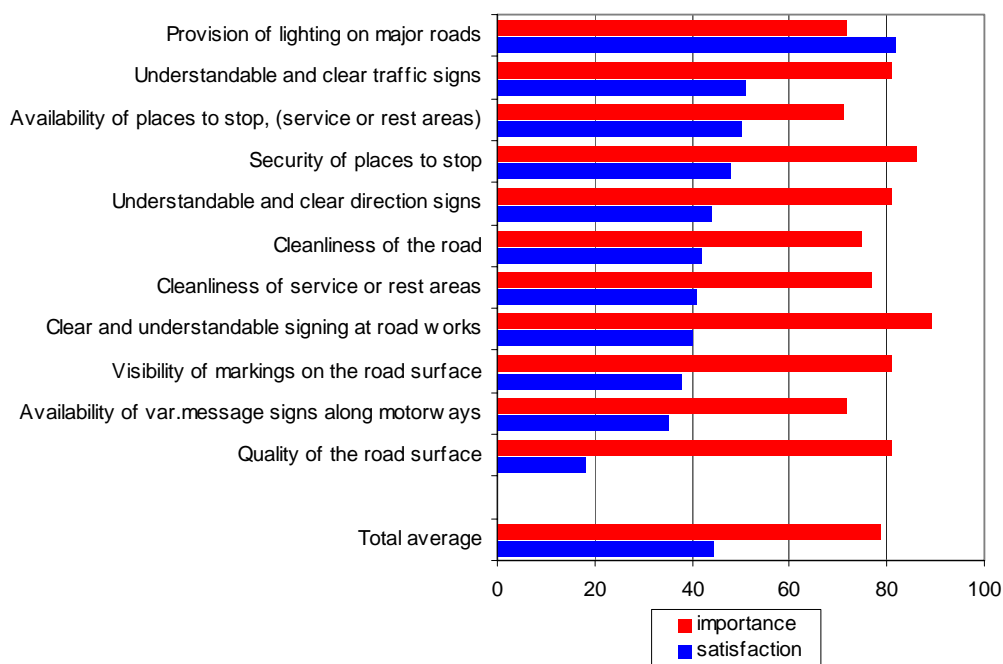
Satisfaction with and importance of aspects of the Belgian network

Figure 4.1 shows the level of satisfaction (percentage (extremely) satisfied) with the road network of Belgium. The figure also shows the importance of the several aspects (percentage (extremely) important). When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 4.1 show that the average scores of the elements included are all considered very important (between 70 and 90 percent). Drivers on the Belgian network are of the opinion that the availability of places to stop is the least important aspect of the Belgian network (71 percent think it is (very) important). Most important is clear and understandable signing at road works.

The drivers on the Belgian roads are most satisfied with the provision of lighting on major roads (82 percent are (very) satisfied). Fewer than 20 percent of the drivers are satisfied with the quality of the road surface. The gap between the level of importance and the level of satisfaction is the greatest for this aspect.

Figure 4.1 Satisfaction with and importance of aspects of the Belgian network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 4.1 shows the satisfaction with and importance of aspects of the Belgian network, split between lorry and car drivers.

On average, car drivers are a little more satisfied (47 percent) than lorry drivers (43 percent). Both groups think that, on average, all aspects are (very) important.

Car drivers are more satisfied with the visibility of markings on the road surface and the quality of the surface. The importance of the availability of places to stop is greater for lorry drivers (81 percent) than for car drivers (60 percent).

Table 4.1 Satisfaction with and importance of aspects of the Belgian network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	31	89	58	45	93	48	38	81	43
understandable and clear direction signs	45	92	47	43	91	48	44	81	37
understandable and clear traffic signs	48	91	43	54	91	37	51	81	30
quality of the road surface	12	90	78	24	92	68	18	81	63
clear and understandable signing at road works	38	90	52	42	88	46	40	89	49
provision of lighting on major roads	83	71	-12	81	73	-8	82	72	-10
availability of places to stop, such as service or rest areas	47	81	34	53	60	7	50	71	21
cleanliness of service or rest areas	39	81	42	43	73	30	41	77	36
security of places to stop.	48	87	39	49	86	37	48	86	38
availability of var. message signs along major motorways	34	72	38	36	73	37	35	72	37
cleanliness of the road	43	74	31	42	77	35	42	75	33
total average	43	83	41	47	82	35	44	79	34

s: percentage (very) satisfied i: percentage (very) important g: gap between importance and satisfaction

Belgium compared with neighbouring countries

It is interesting to see if the satisfaction and the importance of the eleven aspects of the Belgian road network are comparable with neighbouring countries. Table 4.2 displays the satisfaction with and importance of the aspects for Belgium, compared to France, Luxembourg and the Netherlands.

Fewer than half the drivers in Belgium (44 percent) are on average satisfied with the aspects of the network. In the neighbouring countries two thirds of the drivers are satisfied on average. The provision of lighting on major roads is the only aspect with which drivers in Belgium are more satisfied. In Belgium a fifth (18 percent) are satisfied with the quality of the road surface. In the neighbouring countries this aspect is judged to be much better (more than 70 percent are satisfied in France, Luxembourg and the Netherlands).

The importance of the aspects in the four countries compared is the same on average. Somewhere between 70 and 90 percent of the drivers interviewed stated that the several aspects are (very) important.

Table 4.2 Satisfaction with and importance of the aspects of the Belgian, French, Luxembourg and Dutch networks.

	Belgium		France		Lux.		Neth.	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	38	81	79	91	66	86	76	86
understandable and clear direction signs	44	81	77	95	70	92	80	94
understandable and clear traffic signs	51	81	78	94	73	91	81	92
quality of the road surface	18	81	81	93	70	89	71	88
clear and understandable signing at road works	40	89	77	91	71	89	69	89
provision of lighting on major roads	82	72	61	78	71	70	65	65
availability of places to stop, such as service or rest areas	50	71	73	83	53	78	62	73
cleanliness of service or rest areas	41	77	65	86	66	83	53	78
security of places to stop.	48	86	56	88	59	87	54	85
availability of var. message signs along major motorways	35	72	68	77	63	74	70	66
cleanliness of the road	42	75	82	81	76	82	76	74
total average	44	79	72	87	67	84	69	81

s: percentage (very) satisfied i: percentage (very) important

4.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delays: Had the driver experienced a delay? And if so, what had caused it? The results of these questions are discussed in this section.

Traffic information

Table 4.3 first shows us the proportion of the drivers who planned their trip. About 68 percent of the drivers in Belgium planned their trip. More drivers in the surrounding countries planned their trip. Second, table 4.3 shows us how many drivers used traffic information. About one third of the drivers on the networks shown used pre-trip traffic information. Drivers on the network in France, Germany, Luxembourg and the Netherlands often said that the pre-trip information was reliable. The same holds for the usefulness of pre-trip traffic information. In Belgium three quarters of the drivers are of the opinion that the pre-trip traffic information was useful. This percentage is higher in the neighbouring countries.

About a third use on-trip traffic information (42 percent in the Netherlands). Most of the drivers (80 percent or more) judge the on-trip traffic information provided to be reliable and useful.

Table 4.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre-trip				on-trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Belgium	68	37	73	74	29	87	73
France	76	35	91	91	29	93	93
Germany	73	32	85	82	35	85	81
Luxembourg	77	38	88	92	26	88	96
Netherlands	76	27	89	91	42	90	80
Europe	72	33	86	87	31	88	85

Delays

In response to the question whether they experienced delay and if so, what caused it, an average of 40 percent of the drivers did report delays (table 4.4). More than half the drivers who drove in Belgium and Luxembourg experienced delay. The most frequently reported causes of delays on the Belgian network (based on all respondents) are road works (77 percent) and congestion (52 percent). Congestion causes most of the delays in France and the Netherlands.

Table 4.4 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
Belgium	51	52	77	21	8	6
France	27	60	29	23	10	11
Germany	47	56	65	22	11	13
Luxembourg	52	51	71	18	5	3
Netherlands	42	70	47	10	4	1
Europe	40	59	53	18	9	9

4.4. Safety

Drivers were asked questions about traffic safety and their perception of safety at stopping or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

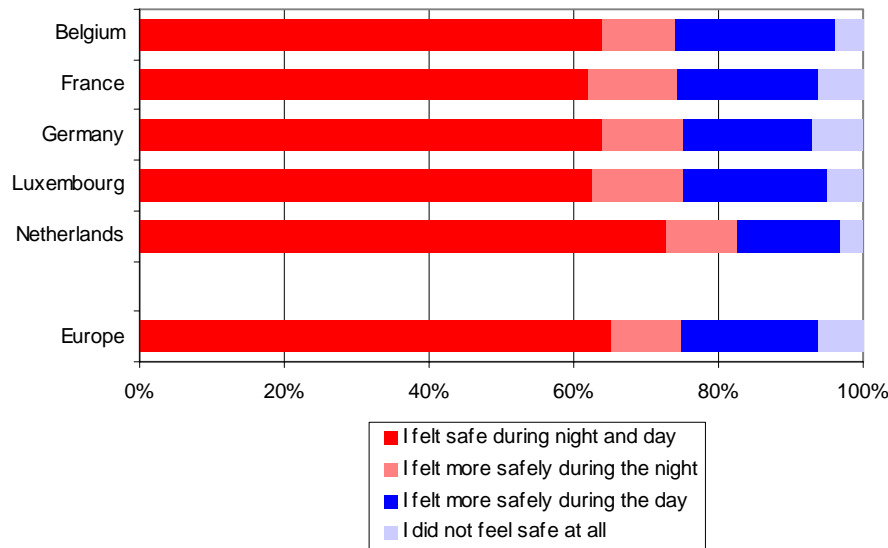
Traffic safety

All drivers were asked to evaluate both countries according to feelings of (in-) security, described as involving road rage, aggressive behaviour by others, gesturing, etc.

Figure 4.2 shows the feeling of (in-) security in Belgium and neighbouring countries. Two thirds of the drivers in Belgium felt secure day and night. A fifth of the drivers felt more secure during the day. Fewer than five percent did not feel safe at all. The percentage of drivers in Belgium who feel safe is comparable with the neighbouring countries.

In the Netherlands the proportion of drivers who feel safe day and night (73 percent) is above the European average of 65 percent.

Figure 4.2 Feeling of (in-) security (percentages).

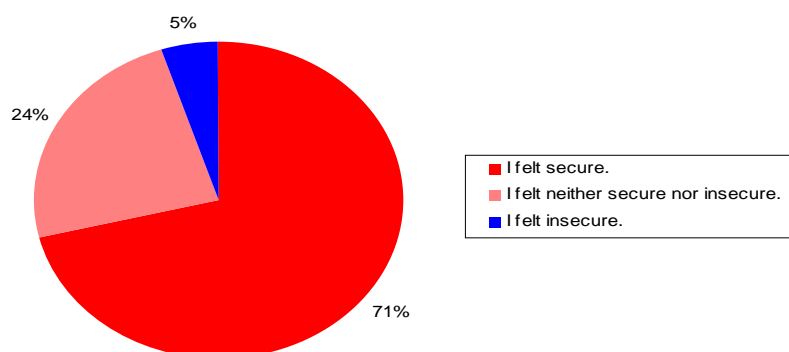


Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had interrupted their journey they were asked about their feelings of safety at these areas. Figure 4.3 shows how many people felt (in-)secure during their stop.

84 Percent of the users of the Belgian network had stopped at a service or rest area. Even more people (93 percent) interrupted their journey in Luxembourg. In the other surrounding countries 70 to 80 percent of the drivers made a stop. Almost three-quarters of the drivers on the Belgian network felt secure during their stop. A quarter of the drivers felt neither secure nor insecure. In Luxembourg and France relatively fewer drivers felt secure (61 and 66 percent, respectively). In the Netherlands 81 percent of the drivers felt secure during their stop at a service or rest area.

Figure 4.3 Feeling of safety during a stop at a service or rest area.

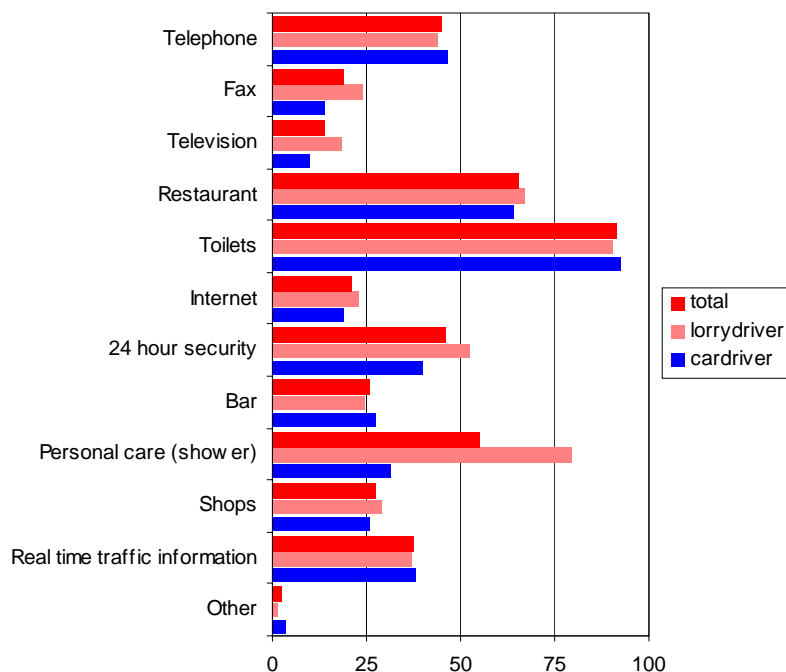


Facilities at rest areas

Besides to the question about safety at rest areas, the drivers were asked about the facilities they expect at such areas. Figure 4.4 shows which facilities the drivers expect at the rest areas in Belgium. The results are split between lorry and car drivers.

Over 90 percent of the drivers expect a toilet at a rest area. Half the drivers also expect a telephone, a restaurant and 24 hour security and 'personal care facilities' such as a shower (especially lorry drivers (80 percent)).

Figure 4.4 Facilities expected at rest areas; lorry and car drivers (percentages).



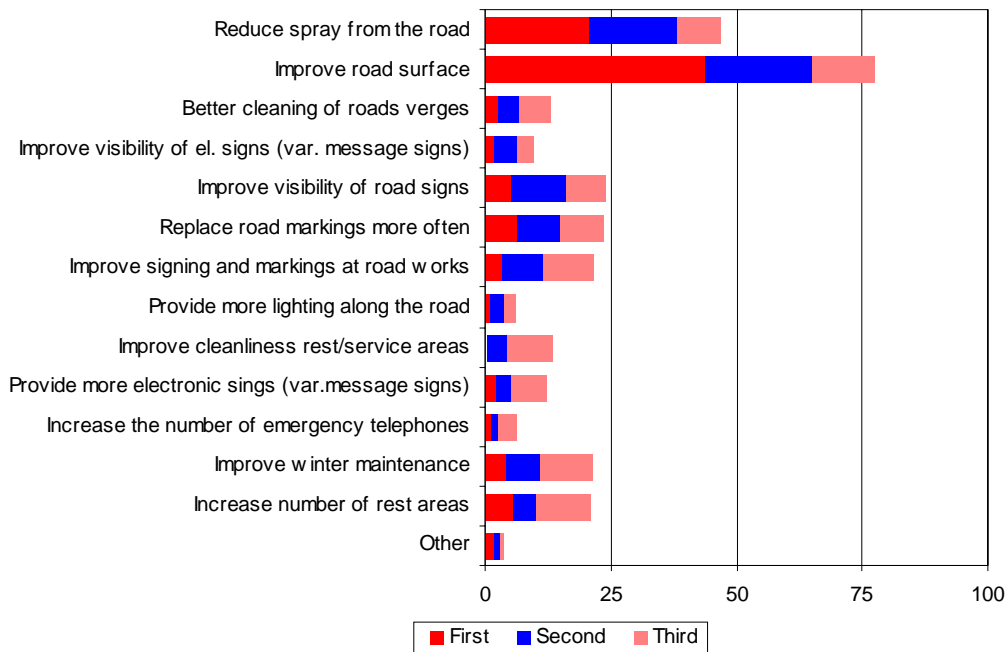
Enhancements to traffic safety and security

Opinions about what authorities should do to enhance traffic safety and security are presented in figure 4.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

The quality of the road surface is considered to be main issue in Belgium. This aspect is mentioned most overall. Almost half the drivers mention this enhancement, assigning it the highest priority. Another enhancement to traffic safety and security is the reduction of spray from the road.

'Reduce spray from the road' and 'improve road surface' are the enhancements that are also mentioned most in the neighbouring countries.

Figure 4.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 4.5 shows the results of this statement for Belgium and surrounding countries. Half the drivers in Belgium disagree with the statement. They believe that the scenery is also important. The same holds for the surrounding countries.

Table 4.5

"It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained." (percentages).

	I agree.	I neither agree nor disagree.	I disagree.
Belgium	21	30	50
France	33	15	52
Germany	25	20	55
Luxembourg	23	21	56
Netherlands	32	24	45
Europe	29	19	52

5. Denmark

5.1. Introduction

This chapter describes the results for Denmark, based on fieldwork conducted by Denmark. Table 5.1 shows the number of interviews per border and organising country.

Table 5.1 Number of interviews on which the results for Denmark are based.

border	organising country	
	Denmark	total
Denmark-Sweden	200	200
Denmark-Germany	200	200
total	400	400

This chapter describes the results in three sections. Section 5.2 deals with satisfaction with road networks. Section 5.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 5.4.

5.2. Satisfaction with Danish network

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

- visibility of markings on the road surface
- understandable and clear direction signs
- understandable and clear traffic signs
- quality of the road surface
- clear and understandable signing at road works
- provision of lighting on major roads
- availability of places to stop, such as service or rest areas
- cleanliness of service or rest areas
- security of places to stop.
- availability of variable message signs along major motorways
- cleanliness of the road

Satisfaction with and importance of aspects of the Danish network

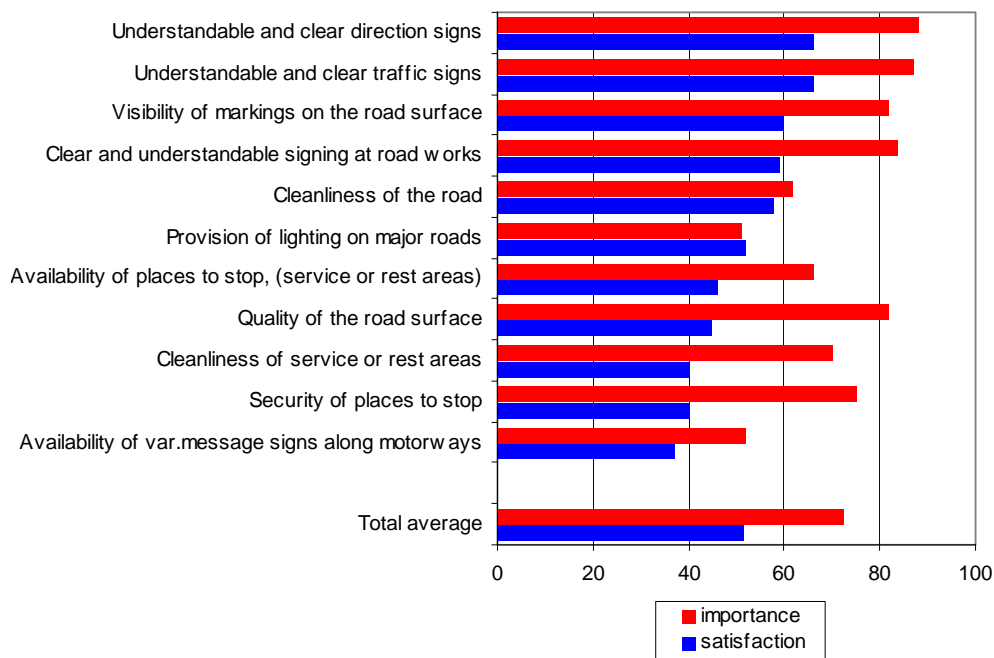
Figure 5.1 shows the level of satisfaction (percentage (extremely) satisfied) with the road network in Denmark. This figure also shows the importance of the several aspects (percentage (extremely) important).

When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 5.1 show that the average scores of most of the elements included are considered very important (between 70 and 90 percent). Drivers on the Danish network are of the opinion that the provision of lighting on major roads is the least important aspect of the Danish network (51 percent think it is (very) important). Most important are clear and understandable direction signs.

The drivers on the Danish roads are most satisfied with understandable and clear direction signs (66 percent are (very) satisfied). Fewer than 30 percent of the drivers are satisfied with the availability of variable message signs along major motorways. The gap between the level of importance and the level of satisfaction is greatest for the quality of road surface. More than 80 percent of the drivers mentioned the quality of the road surface as being (very) important while fewer than half the drivers (45 percent) are satisfied with this aspect.

Figure 5.1 Satisfaction with and importance of aspects of the Danish network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 5.1 shows the satisfaction with and importance of aspects of the Danish network, split between lorry and car drivers.

On average car drivers are a little more satisfied (57 percent) than lorry drivers (46 percent). Both groups think that, on average, most aspects are (very) important.

Car drivers are more satisfied with the visibility of markings on the road surface, the quality of the road surface and the provision of lighting on major roads.

Table 5.1 Satisfaction with and importance of aspects of the Danish network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	52	76	24	67	88	21	60	82	22
understandable and clear direction signs	61	85	24	70	91	21	66	88	22
understandable and clear traffic signs	61	83	22	70	91	21	66	87	21
quality of the road surface	37	80	43	52	84	32	45	82	37
clear and understandable signing at road works	53	82	29	64	86	22	59	84	25
provision of lighting on major roads	44	44	0	59	58	-1	52	51	-1
availability of places to stop, such as service or rest areas	38	70	32	54	62	8	46	66	20
cleanliness of service or rest areas	35	69	34	45	71	26	40	70	30
security of places to stop.	36	75	39	43	75	32	40	75	35
availability of var. message signs along major motorways	32	50	18	41	55	14	37	52	15
cleanliness of the road	55	60	5	61	64	3	58	62	4
total average	46	70	25	57	75	18	52	73	21

s: percentage (very) satisfied

i: percentage (very) important

g: gap between importance and satisfaction

Denmark compared with neighbouring countries

It is interesting to see if the satisfaction with and the importance of the eleven aspects of the Danish road network are comparable with neighbouring countries. Table 5.2 displays the satisfaction with and importance of the aspects for Denmark, compared to Germany and Sweden.

On average, half the drivers in Denmark (52 percent) are satisfied with the aspects of the network. In the neighbouring countries an average of 60 percent of the drivers are satisfied. The quality of the road surface and the provision of lighting on major roads are the two aspects with which drivers in Denmark are more satisfied than in Germany. All the aspects receive a higher score for satisfaction in Sweden than in Denmark.

In Germany all aspects are considered to be more important than in Sweden and Denmark.

Table 5.2 Satisfaction with and importance of the aspects of the Danish, German and Swedish network.

	Denmark		Germany		Sweden	
	s	i	s	i	s	i
visibility of markings on the road surface	60	82	61	90	72	81
understandable and clear direction signs	66	88	68	94	79	87
understandable and clear traffic signs	66	87	67	93	79	87
quality of the road surface	45	82	40	91	58	81
clear and understandable signing at road works	59	84	64	91	74	84
provision of lighting on major roads	52	51	42	66	56	50
availability of places to stop, such as service or rest areas	46	66	59	80	61	66
cleanliness of service or rest areas	40	70	53	85	46	67
security of places to stop.	40	75	55	88	42	71
availability of var. message signs along major motorways	37	52	50	68	43	53
cleanliness of the road	58	62	66	79	64	57
total average	52	73	57	84	61	71

s: percentage (very) satisfied

i: percentage (very) important

5.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delay: Had the driver experienced a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Table 5.3 first shows us the proportion of drivers who planned their trip. About 75 percent of the drivers in Denmark planned their trip. The fraction of drivers who planned their trip is lower in the surrounding countries. Second, table 5.3 shows us how many drivers used traffic information. About one third of the drivers on the networks shown used pre-trip traffic information. In Sweden only 13 percent used pre-trip traffic information. Drivers on the networks in Denmark, Germany and Sweden often said that the pre-trip information was reliable. The same holds for the usefulness of pre-trip traffic information. In Denmark more than three-quarters of the drivers are of the opinion that the pre-trip traffic information was useful. In Sweden every driver who used pre-trip traffic information found that it was useful.

About a third use on-trip traffic information (13 percent in Sweden). Most drivers (80 percent or more) judge the on-trip traffic information to be reliable and useful.

Table 5.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre-trip				on-trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Denmark	75	34	80	82	27	77	74
Germany	73	32	85	82	35	85	81
Sweden	48	13	100	100	13	100	100
Europe	72	33	86	87	31	88	85

Delays

In answer to the question whether they experienced delay and what had caused it, on average 40 percent of the drivers did report delays (table 5.4). In Denmark and Sweden fewer than 25 percent of drivers reported delays (Germany 47 percent). The most frequently reported causes of delays on the Danish network (based on all respondents) are congestion (75 percent) and road works (52 percent). In Germany road works cause most of the delays.

Table 5.4 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
Denmark	24	75	52	19	15	2
Germany	47	56	65	22	11	13
Sweden	22	50	41	14	9	9
Europe	40	59	53	18	9	9

5.4. Safety

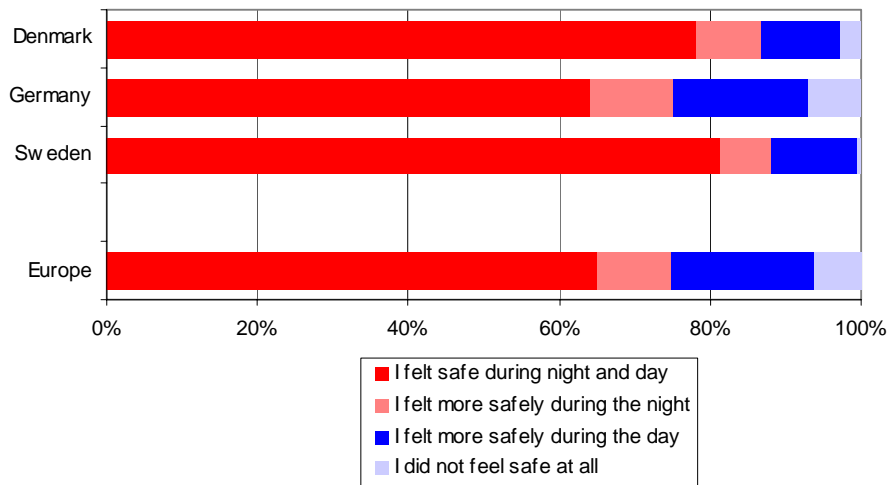
Drivers were asked questions about traffic safety and their perception of safety at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

Traffic safety

All drivers were asked to evaluate both countries according to feelings of (in-) security, described as involving road rage, aggressive behaviour by others, gesturing, etc.

Figure 5.2 shows the feeling of (in-) security in Denmark and neighbouring countries. Almost 80 percent of the drivers in Denmark felt secure both during the day and at night. A tenth of the drivers felt more secure during the day. Fewer than three percent did not feel safe at all. The percentage of the drivers in Denmark who feel safe is comparable with Sweden. In Germany the proportion of drivers who feel safe both during the day and at night (64 percent) is similar to the European average of 65 percent.

Figure 5.2 Feeling of (in-) security (percentages).

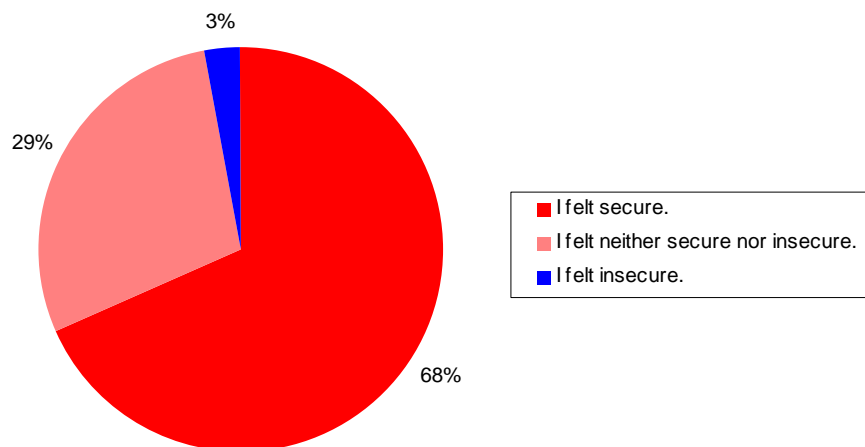


Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had interrupted their trip, they were asked about their perception of safety at these areas. Figure 5.3 shows how many people feel (in-) secure during their stop.

73 Percent of the users of the Danish network had stopped at a service or rest area. More people (84 percent) made a stop in Germany. Two thirds of the drivers on the Danish network felt secure during their stop. About 29 percent of the drivers felt neither secure nor insecure. In Sweden 84 percent felt secure; while in Germany the figure is 65 percent.

Figure 5.3 Feeling of safety during a stop at a service or rest area.

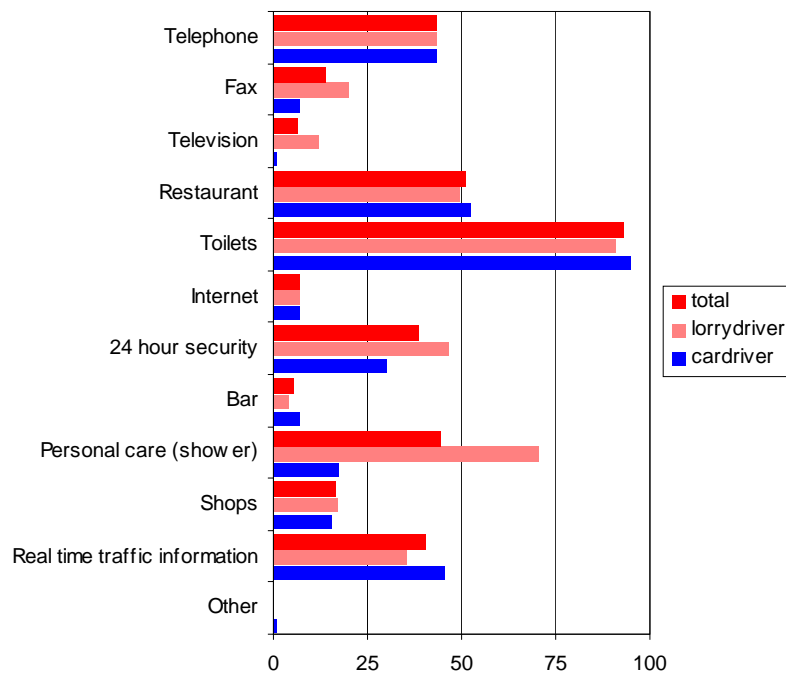


Facilities at rest areas

Besides the question about safety at rest areas the drivers were asked about the facilities they expect at such areas. Figure 5.4 shows which facilities the driver expect at the rest areas in Denmark. The results are split between lorry and car drivers.

Over 90 percent of the drivers expect a toilet at a rest area. Half the drivers also expect a telephone and a restaurant. A third are interested in 24-hour security, personal care (shower) and real time traffic information. Lorry drivers in particular expect personal care facilities at rest areas.

Figure 5.4 Facilities expected at rest areas; lorry and car drivers (percentages).

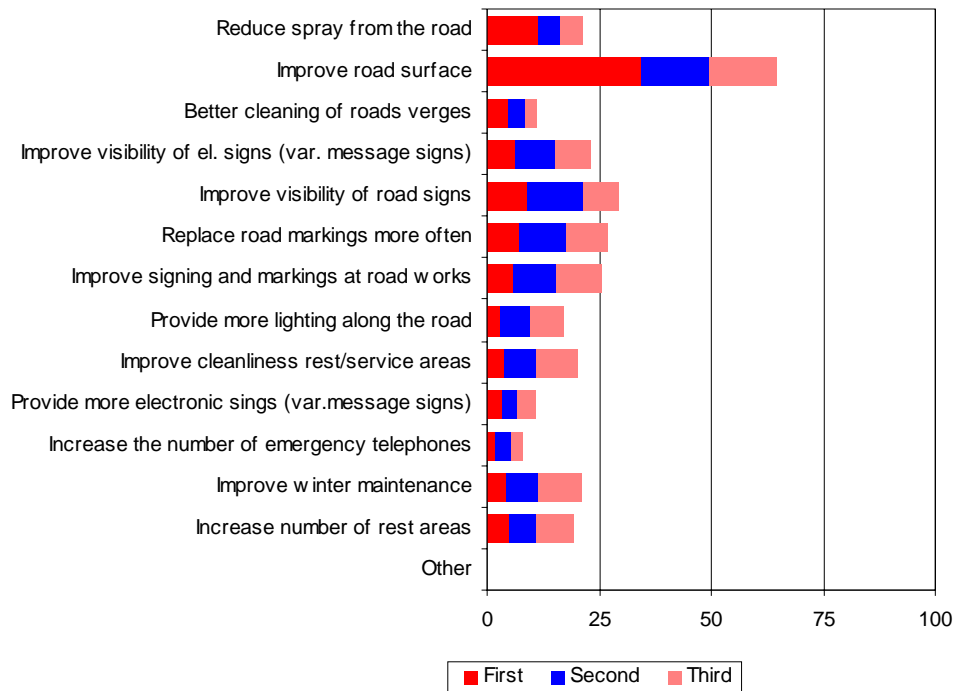


Enhancements to traffic safety and security

Opinions about what the authorities should do to enhance traffic safety and security are presented in figure 5.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

The quality of the road surface is considered to be the main issue in Denmark. This aspect is mentioned most. A third of the drivers mention this enhancement and allocate it the highest priority. The other enhancements score 30% or less. 'Improve road surface' is also most mentioned most in the neighbouring countries.

Figure 5.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 5.5 shows the results of this statement for Denmark and surrounding countries. A third of the drivers in Denmark disagree with the statement (38 percent). For them the scenery is also important. In Germany half the drivers do not agree with the statement. Many drivers in Sweden are of the opinion that the maintenance of the road is very important, more important than the scenery.

Table 5.5

"It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained" (percentages).

	I agree	I neither agree nor disagree	I disagree
Denmark	32	31	38
Germany	25	20	55
Sweden	41	30	29
Europe	29	19	52

6. England

6.1. Introduction

This chapter describes the results for England, based on fieldwork conducted by England, Ireland, France and the Netherlands. Table 6.1 shows the number of interviews per border and organising country.

Table 6.1 Number of interviews on which the results for England are based.

border	organising country				
	England	Ireland	Netherlands	France	total
England-Ireland	83	302			385
England-France	100			107	207
England-Netherlands			205		205
total	183	302	205	107	797

This chapter describes the results in three sections. Section 6.2 deals with satisfaction with road networks. Section 6.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 6.4.

6.2. Satisfaction with English network

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

- visibility of markings on the road surface
- understandable and clear direction signs
- understandable and clear traffic signs
- quality of the road surface
- clear and understandable signing at road works
- provision of lighting on major roads
- availability of places to stop, such as service or rest areas
- cleanliness of service or rest areas
- security of places to stop.
- availability of variable message signs along major motorways
- cleanliness of the road

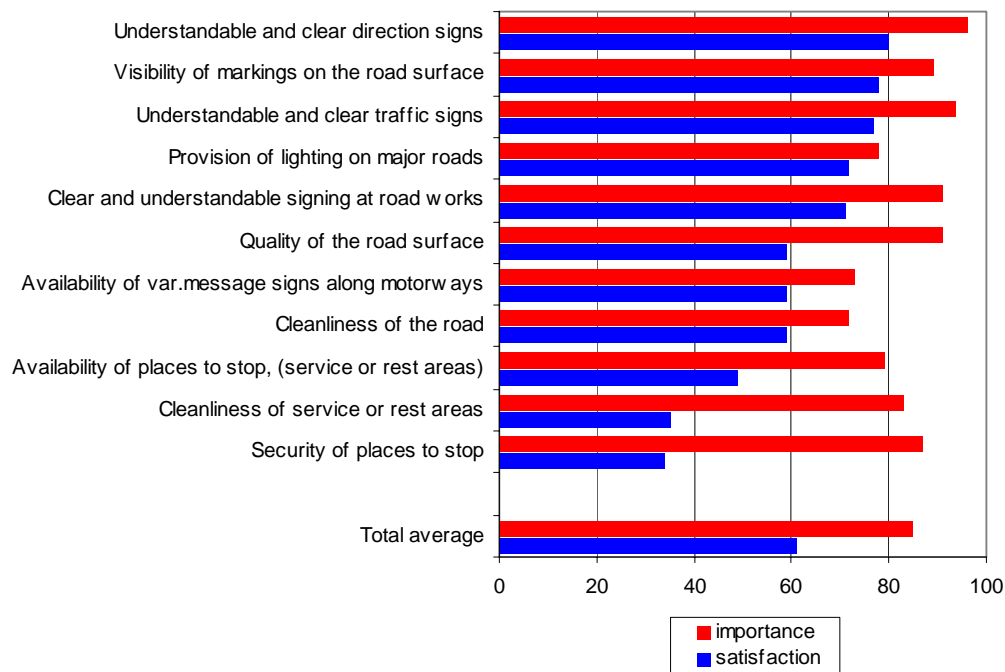
Satisfaction with and importance of aspects of the English network

Figure 6.1 shows the level of satisfaction (percentage (extremely) satisfied) for the road network of England. This figure also shows the importance of the several aspects (percentage (extremely) important). When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 6.1 show that the average scores of most of the elements included are considered very important (on average 85 percent). Drivers on the English network are of the opinion that the cleanliness of the road is the least important aspect of the English network (72 percent think it is (very) important). Most important are clear and understandable direction signs.

The drivers on the English roads are most satisfied with understandable and clear direction signs (80 and 77 percent are (very) satisfied, respectively). Only a third of the drivers are satisfied with the security of places to stop. The gap between the level of importance and the level of satisfaction is the greatest for this aspect, too.

Figure 6.1 Satisfaction with and importance of aspects of the English network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 6.1 shows the satisfaction with and importance of the aspects of the English network, split between for lorry and car drivers.

On average car drivers are more satisfied (68 percent) than lorry drivers (59 percent). Both groups think that, on average, most aspects are (very) important.

Car drivers are more satisfied with the availability of places to stop, the cleanliness of service areas and the security of places to stop.

Table 6.1 Satisfaction with and importance of aspects of the English network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	77	87	10	79	92	13	78	89	11
understandable and clear direction signs	81	93	12	79	98	19	80	96	16
understandable and clear traffic signs	77	91	14	78	97	19	77	94	17
quality of the road surface	61	90	29	58	93	35	59	91	32
clear and understandable signing at road works	71	90	19	70	91	21	71	91	20
provision of lighting on major roads	71	78	7	72	78	6	72	78	6
availability of places to stop, such as service or rest areas	39	87	48	82	71	-11	49	79	30
cleanliness of service or rest areas	28	82	54	66	84	18	35	83	48
security of places to stop.	25	86	61	45	87	42	34	87	53
availability of var. message signs along major motorways	58	76	18	59	69	10	59	73	14
cleanliness of the road	60	75	15	58	68	10	59	72	13
total average	59	85	26	68	84	17	61	85	24

s: percentage (very) satisfied i: percentage (very) important g: gap between importance and satisfaction

England compared with neighbouring countries

It is interesting to see if the satisfaction with and the importance of the eleven aspects of the English road network are comparable with neighbouring countries. Table 6.2 displays the satisfaction with and importance of the aspects for England, compared with Ireland.

Two thirds of drivers in England, the Netherlands and France are on average satisfied with the aspects of the network. In Ireland, on average 35 percent of the drivers are satisfied with the road network. In France and the Netherlands more than two third of the drivers are satisfied. In England the visibility of markings on the road surface is satisfactory (78 percent are satisfied). In Ireland less than a third are satisfied with this aspect. In England 59 percent of the drivers are satisfied with the quality of the road surface. In France and the Netherlands drivers are more satisfied (71 and 81 percent respectively). The security of places to stop is more satisfactory in France and the Netherlands than in England. Half the users of these road networks are satisfied with the security of places to stop. In England a third are satisfied with this aspect. In Ireland less than a quarter are satisfied with the quality of the road surface and the availability of places to stop.

In England, Ireland, the Netherlands and France the several aspects are considered to be equally important (85 percent on average).

Table 6.2 Satisfaction with and importance of the aspects of the English and surrounding networks.

	England		Ireland		Neth.		France	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	78	89	32	92	76	86	79	91
understandable and clear direction signs	80	96	32	96	80	94	77	95
understandable and clear traffic signs	77	94	39	94	81	92	78	94
quality of the road surface	59	91	24	92	71	88	81	93
clear and understandable signing at road works	71	91	42	89	69	89	77	91
provision of lighting on major roads	72	78	38	75	65	65	61	78
availability of places to stop, such as service or rest areas	49	79	18	78	62	73	73	83
cleanliness of service or rest areas	35	83	29	84	53	78	65	86
security of places to stop.	34	87	28	88	54	85	56	88
availability of var. message signs along major motorways	59	73	31	72	70	66	68	77
cleanliness of the road	59	72	44	74	76	74	82	81
total average	61	85	32	85	69	81	72	87

s: percentage (very) satisfied

i: percentage (very) important

6.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delay: Had the driver experienced a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Table 6.3 first shows us the proportion of drivers who planned their trip. About 67 percent of the drivers in England planned their trip. In Ireland 83 percent of the drivers planned their trip. In the Netherlands and France 76 percent of the drivers planned their trip. Second, table 6.3 shows us how many drivers used traffic information. About a quarter of the drivers on the English, Dutch and Irish network used pre-trip traffic information. This is below the European average of 33 percent and the French percentage of 35 percent. Drivers on the networks of England and Ireland often said that the pre-trip information was reliable. The same holds for the usefulness of pre-trip traffic information. In Ireland more than 95 percent of the drivers are of the opinion that the pre-trip traffic information was useful.

About a quarter of the drivers on the English network use on-trip traffic information. In the Netherlands 42 percent used on-trip traffic information. Most of the drivers (80 percent or more) assessed the on-trip traffic information as both reliable and useful.

Table 6.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre-trip				on-trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
England	67	27	87	88	29	87	85
Ireland	83	28	93	97	25	95	97
Netherlands	76	27	89	91	42	90	80
France	76	35	91	91	29	93	93
Europe	72	33	86	87	31	88	85

Delays

In response to the question whether they experienced delay and if so, what caused it, on average 40 percent of the drivers did report delays (table 6.4). In England and Ireland almost half the drivers reported delays (France 27 percent). The most frequently reported causes of delays on the English network (based on all respondents) are congestion (56 percent) and road works (45 percent). In Ireland, too, congestion and road works caused most of the delays. In Ireland 21 percent mentioned weather conditions as a cause for delay.

Table 6.4 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
England	48	56	45	18	14	12
Ireland	49	68	62	8	21	13
Netherlands	42	70	47	10	4	1
France	27	60	29	23	10	11
Europe	40	59	53	18	9	9

6.4. Safety

Drivers were asked questions about traffic safety and their perception of safety at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

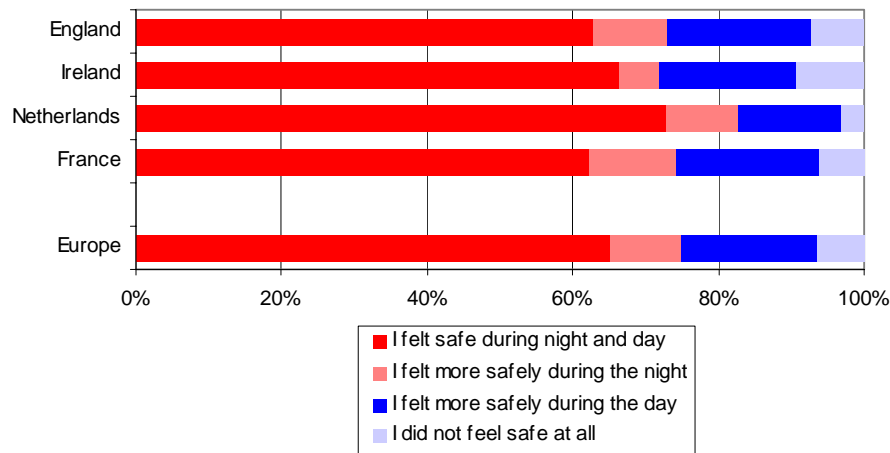
Traffic safety

All drivers were asked to evaluate both countries in terms of feelings of (in-)security, described as involving road rage, aggressive behaviour by others, gestures etc.

Figure 6.2 shows the feeling of (in-)security in England, Ireland, France and the Netherlands. Almost two thirds of the drivers in England felt secure both during the day and at night. A fifth of the drivers felt more secure during the day. Seven percent did not feel safe at all. The percentage of drivers in England who feel safe is comparable with Ireland and the European average. In the Netherlands 73 percent of the drivers felt safe.

The difference between car and lorry drivers in England is worth noting Half the lorry drivers felt safe during their stop at the English service or rest areas while three quarters of the car drivers felt safe during their stop.

Figure 6.2 Feeling of (in-)security (percentages).

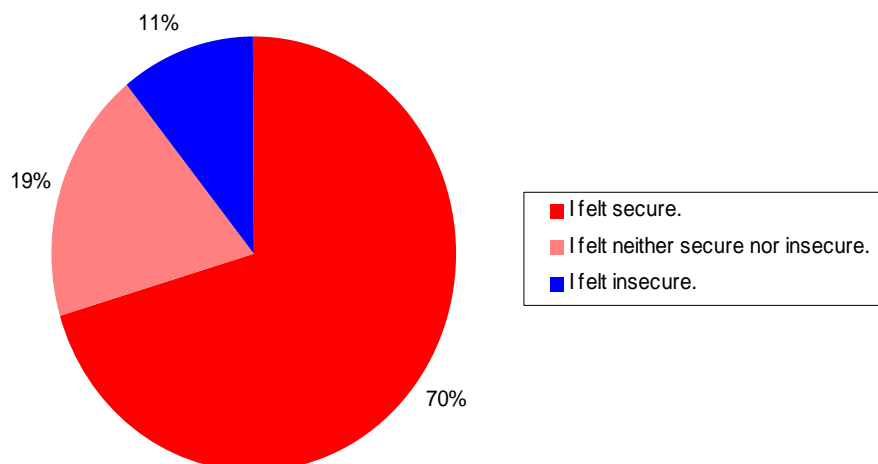


Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had interrupted their journey they were asked about their perception of safety at these service or rest areas. Figure 6.3 shows how many people felt (in-) secure during their stop.

73 Percent of the users of the English network made a stop at a service or rest area. Fewer people (56 percent) interrupted their journey in Ireland. 70 Percent of the drivers on the English network felt secure during their stop. About 19 percent of the drivers felt neither secure nor insecure. In Ireland 63 percent felt secure; while the European average is 68 percent.

Figure 6.3 Feeling of safety during a stop at a service or rest area.

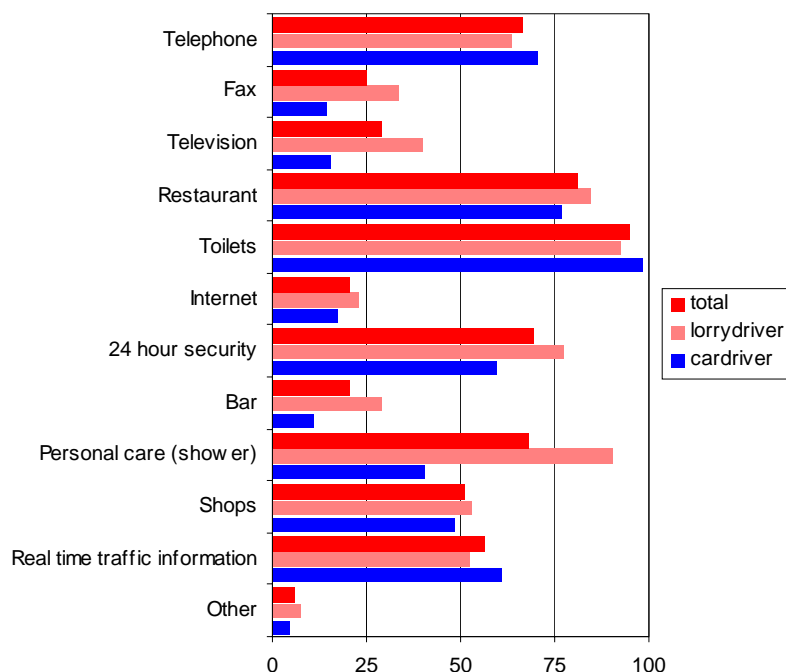


Facilities at rest areas

Besides the question about the safety at rest areas the driver were asked which facilities they expect at rest areas. Figure 6.4 shows which facilities the drivers expect at the rest areas in England. The results are split between for lorry and car drivers.

Over 90 percent of the drivers expect a toilet at a rest area. More than 70 percent of the drivers expect a telephone, a restaurant and personal care facilities. Lorry drivers in particular expect personal care facilities at rest areas.

Figure 6.4 Facilities expected at rest areas; lorry and car drivers (percentages).



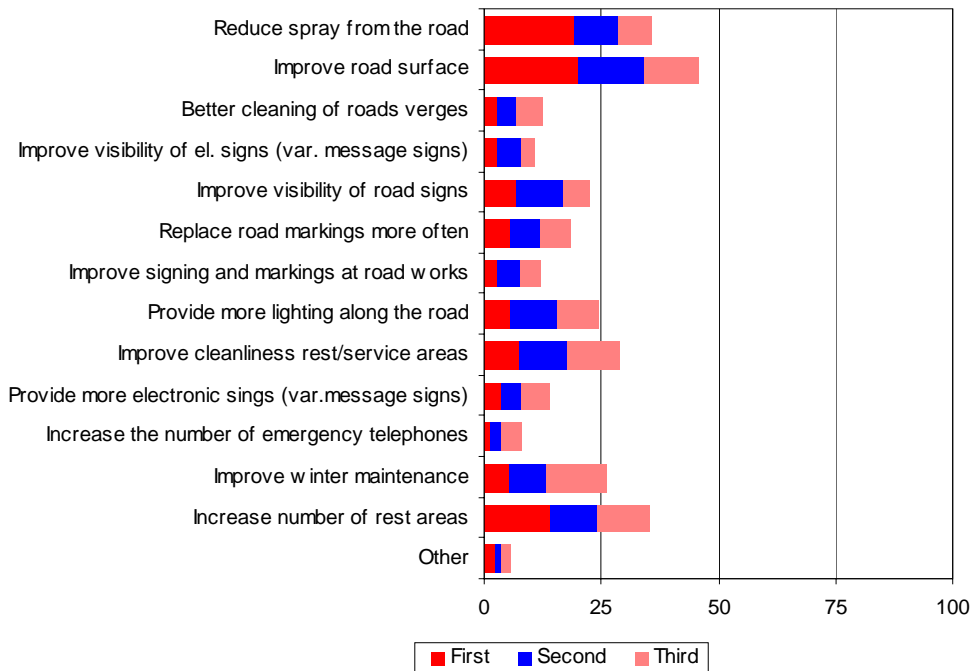
Enhancements to traffic safety and security

Opinions on what the authorities should do to enhance traffic safety and security are presented in figure 6.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

The quality of the road surface is considered to be the main issue in England. This aspect is mentioned most overall. A fifth of the drivers mention this enhancement, according it the highest priority. Other enhancements are reducing spray from the road and increasing the number of rest areas.

'Improve road surface' is also most frequently mentioned in Ireland. Other enhancements mentioned by the drivers on the Irish network are 'improve visibility of road signs' and 'increase number of rest areas'.

Figure 6.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 6.5 shows the results of this statement for England, Ireland the Netherlands and France. Half the drivers of the shown countries disagree with the statement. Maintenance is more important than the quality of the scenery to about 40 percent of the drivers in England and Ireland. In the Netherlands and France a third agree with the statement.

Table 6.5 "It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained" (percentages).

	I agree	I neither agree nor disagree	I disagree
England	39	15	47
Ireland	37	15	48
Netherlands	32	24	45
France	33	15	52
Europe	29	19	52

7. France

7.1. Introduction

This chapter describes the results for France, based on fieldwork conducted by France, Belgium, England, Luxembourg and Switzerland. Table 7.1 shows the number of interviews per border and organising country.

Table 7.1 Number of interviews on which the results for France are based.

border	organising country				
	France	Belgium (Flanders)	England	Luxembourg	total
France-Belgium	100	102			202
France-England	107		100		207
France-Spain	404				404
France-Italy	203				203
France-Switzerland	101				101
France-Germany	199				199
France-Ireland	167				167
France-Luxembourg				121	121
total	1,281	102	100	121	1,604

This chapter describes the results in three sections. Section 7.2 deals with satisfaction with road networks. Section 7.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 7.4.

7.2. Satisfaction with French network

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

- visibility of markings on the road surface
 - understandable and clear direction signs
 - understandable and clear traffic signs
 - quality of the road surface
 - clear and understandable signing at road works
 - provision of lighting on major roads
 - availability of places to stop, such as service or rest areas
 - cleanliness of service or rest areas
 - security of places to stop.
 - availability of variable message signs along major motorways
 - cleanliness of the road
-

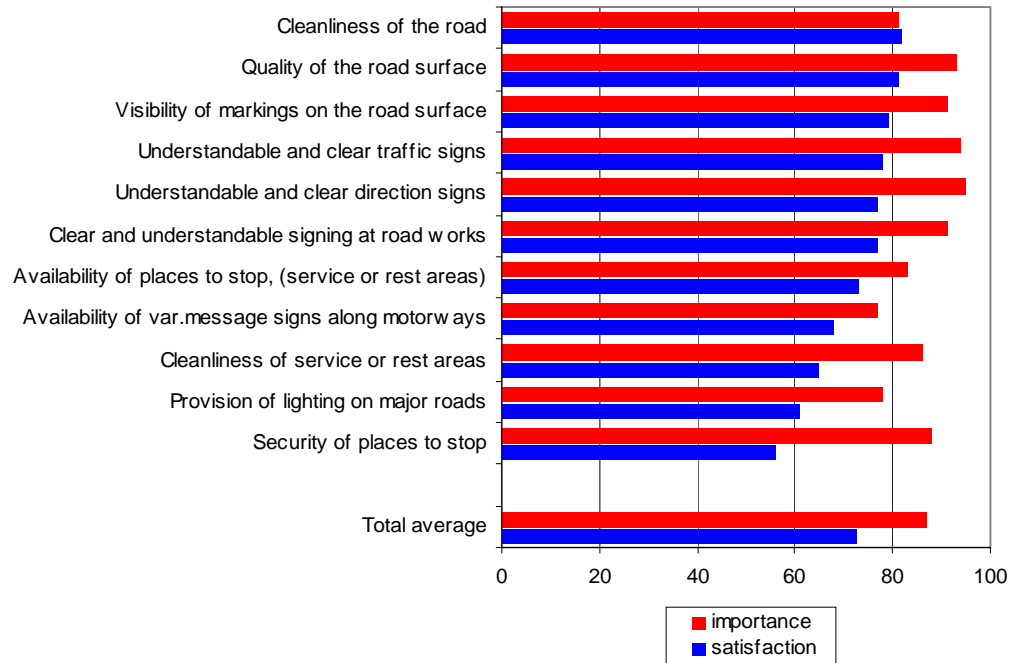
Satisfaction with and importance of aspects of the French network

Figure 7.1 shows the level of satisfaction (percentage (extremely) satisfied) with the road network of France. The figure also shows the importance of the several aspects (percentage (extremely) important). When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 7.1 show that most of the elements included are considered to be very important (90 percent on average). Drivers on the French network are of the opinion that the availability of variable message signs along motorways is the least important aspect of the French network (77 percent thinks it is (very) important). Most important are clear and understandable direction and traffic signs (95 percent (very important)).

The drivers on the French roads are most satisfied with the cleanliness of the road and the quality of the road surface (82 and 81 percent, respectively, are (very) satisfied). Fewer than 60 percent are satisfied with the security of places to stop. The gap between the level of importance and the level of satisfaction is greatest for this aspect, too.

Figure 7.1 Satisfaction and importance of aspects of the French network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 7.1 shows the satisfaction with and importance of the aspects of the French network, split between lorry and car drivers. On average there is only a small difference between the importance of the several aspects. Both groups think that, on average, most aspects are (very) important. Car drivers are more satisfied with the availability of places to stop and the security of places to stop.

Table 7.1 Satisfaction with and importance of aspects of the French network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	76	90	14	81	91	10	79	91	12
understandable and clear direction signs	78	94	16	77	96	19	77	95	18
understandable and clear traffic signs	78	94	16	78	94	16	78	94	16
quality of the road surface	79	92	13	82	94	12	81	93	12
clear and understandable signing at road works	79	92	13	76	90	14	77	91	14
provision of lighting on major roads	58	76	18	65	80	15	61	78	17
availability of places to stop, such as service or rest areas	64	90	26	82	77	-5	73	83	10
cleanliness of service or rest areas	63	87	24	66	85	19	65	86	21
security of places to stop.	47	88	41	66	88	22	56	88	32
availability of var. message signs along major motorways	69	79	10	67	74	7	68	77	9
cleanliness of the road	79	81	2	86	81	-5	82	81	-1
total average	70	88	18	75	86	11	72	87	15

s: percentage (very) satisfied i: percentage (very) important g: gap between importance and satisfaction

France compared with neighbouring countries

It is interesting to see if the satisfaction with and the importance of the eleven aspects of the French road network are comparable with neighbouring countries. Table 7.2a displays the satisfaction with and importance of the aspects for France, compared with Germany, Italy and Spain. Table 7.2b displays the results for France compared with Luxembourg, Belgium and Switzerland. Table 7.2c shows the results for France compared with England and Ireland.

Three quarters of drivers in France (72 percent) are on average satisfied with the aspects of the network. Fewer drivers are satisfied in the neighbouring countries. On average 57 percent of the drivers in Germany, 53 percent of the drivers in Spain and 40 percent of the drivers in Italy are satisfied. In France over 80 percent are satisfied with the quality of the road surface. In the neighbouring countries fewer than half the drivers are satisfied with the quality of the road surface. In France the cleanliness of service or rest areas is satisfactory (65 percent satisfied). In Germany half the drivers (53 percent) are satisfied with this aspect. In Italy and Spain fewer than a third of drivers assess the cleanliness as adequate.

In France and the neighbouring countries the various aspects are considered to be more or less equally important (between 80 and 90 percent on average). In Spain every aspect is considered important by more than 80 percent of drivers.

Table 7.2a Satisfaction with and importance of the aspects of the French and surrounding networks.

	France		Germany		Spain		Italy	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	79	91	61	90	62	97	43	87
understandable and clear direction signs	77	95	68	94	61	97	48	93
understandable and clear traffic signs	78	94	67	93	64	97	51	92
quality of the road surface	81	93	40	91	51	97	38	89
clear and understandable signing at road works	77	91	64	91	62	95	42	89
provision of lighting on major roads	61	78	42	66	60	88	45	82
availability of places to stop, such as service or rest areas	73	83	59	80	35	92	35	84
cleanliness of service or rest areas	65	86	53	85	32	91	19	82
security of places to stop.	56	88	55	88	48	91	30	89
availability of var. message signs along major motorways	68	77	50	68	43	81	47	76
cleanliness of the road	82	81	66	79	69	81	47	83
total average	72	87	57	84	53	92	40	86

s: percentage (very) satisfied

i: percentage (very) important

Compared with Luxembourg, Belgium and Switzerland more drivers of the French network are satisfied. In Belgium less than half of the drivers is, on average, satisfied with the road network (table 7.2b). In France over 80 percent are satisfied with the quality of the road surface. In the neighbouring countries Luxembourg and Switzerland 70 percent are satisfied with this aspect. In Belgium less than a fifth of the drivers are satisfied with the quality of the road surface.

Table 7.2b Satisfaction with and importance of the aspects of the French and surrounding networks.

	France		Lux.		Belgium		Switz.	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	79	91	66	86	38	81	83	90
understandable and clear direction signs	77	95	70	92	44	81	79	93
understandable and clear traffic signs	78	94	73	91	51	81	80	94
quality of the road surface	81	93	70	89	18	81	70	88
clear and understandable signing at road works	77	91	71	89	40	89	76	91
provision of lighting on major roads	61	78	71	70	82	72	67	73
availability of places to stop, such as service or rest areas	73	83	53	78	50	71	45	86
cleanliness of service or rest areas	65	86	66	83	41	77	47	86
security of places to stop	56	88	59	87	48	86	73	92
availability of var. message signs along major motorways	68	77	63	74	35	72	58	70
cleanliness of the road	82	81	76	82	42	75	88	83
total average	72	87	67	84	44	79	70	86

s: percentage (very) satisfied

i: percentage (very) important

In England and Ireland 61 percent of the drivers are on average satisfied with the road network. In France 72 percent of the drivers are satisfied. In France two third of the drivers are satisfied with the cleanliness of the service or rest areas. In England and Ireland a third of the drivers are satisfied with this aspect.

Table 7.2c Satisfaction with and importance of the aspects of the French and surrounding networks.

	France		England		Ireland	
	s	i	s	i	s	i
visibility of markings on the road surface	79	91	78	89	32	92
understandable and clear direction signs	77	95	80	96	32	96
understandable and clear traffic signs	78	94	77	94	39	94
quality of the road surface	81	93	59	91	24	92
clear and understandable signing at road works	77	91	71	91	42	89
provision of lighting on major roads	61	78	72	78	38	75
availability of places to stop, such as service or rest areas	73	83	49	79	18	78
cleanliness of service or rest areas	65	86	35	83	29	84
security of places to stop.	56	88	34	87	28	88
availability of var. message signs along major motorways	68	77	59	73	31	72
cleanliness of the road	82	81	59	72	44	74
total average	72	87	61	85	32	85

s: percentage (very) satisfied

i: percentage (very) important

7.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delay: did the driver experience a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Table 7.3 first shows the proportion of drivers who planned their trip. About 76 percent of the drivers in France planned their trip, which is comparable with the neighbouring countries, except for Spain (51 percent of the drivers planned their trip). Second, table 7.3 shows how many drivers used traffic information. About a third of the drivers on the French network used pre-trip traffic information (the European average is 33 percent). In Italy 43 percent of the drivers used pre-trip traffic information. Drivers on the networks of France, Germany, Italy, Luxembourg, Spain and Switzerland often said that the pre-trip information was reliable and useful (between 80 and 90 percent). In Belgium three quarters of the drivers judged the pre-trip traffic information to be reliable and useful.

Almost a third of the drivers on the French network use on-trip traffic information. In Switzerland, half the drivers used on-trip traffic information. Most of the drivers in the countries shown (80 percent or more) judge the on-trip traffic information to be reliable. Except for Belgium, more than 80 percent also found the on-trip traffic information useful.

Table 7.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre-trip				on-trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Belgium	68	37	73	74	29	87	73
England	67	27	87	88	29	87	85
France	76	35	91	91	29	93	93
Germany	73	32	85	82	35	85	81
Italy	74	43	84	85	39	88	77
Luxembourg	77	38	88	92	26	88	96
Spain	51	39	92	95	11	95	100
Switzerland	71	40	82	84	49	84	84
Europe	72	33	86	87	31	88	85

Delays

In answer to the question whether they had experienced delay and its cause, on average 40 percent of drivers did report delays (table 7.4). In France and Spain a quarter of the drivers reported delays. The most frequently reported causes of delays on the French network (based on all respondents) are congestion (60 percent) and road works (29 percent). Road works caused delay especially in Luxembourg and Belgium.

Table 7.4 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
Belgium	51	52	77	21	8	6
England	48	56	45	18	14	12
France	27	60	29	23	10	11
Germany	47	56	65	22	11	13
Italy	40	72	39	22	4	10
Luxembourg	52	51	71	18	5	3
Spain	27	56	16	19	2	19
Switzerland	43	58	56	19	5	12
Europe	40	59	53	18	9	9

7.4. Safety

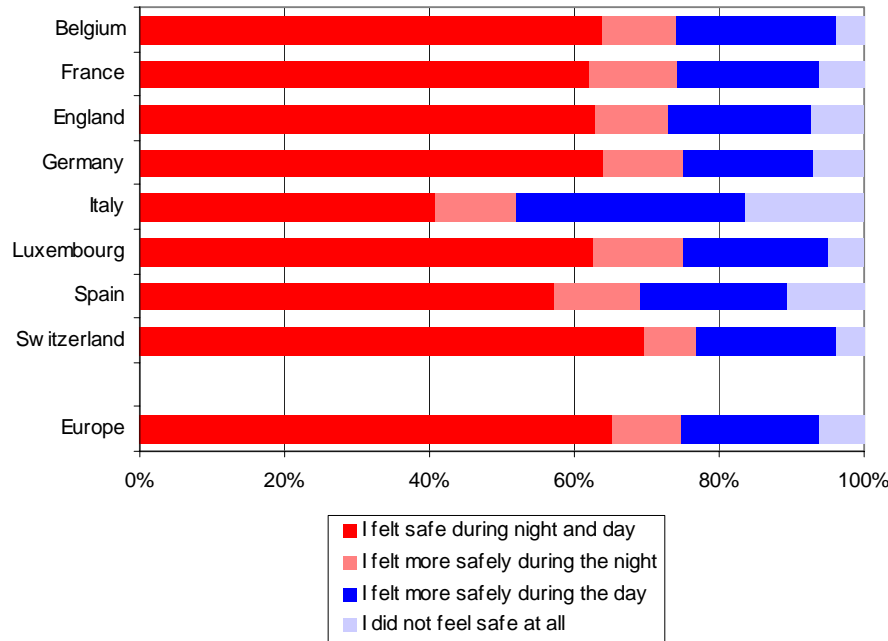
Drivers were asked questions about traffic safety and their perception of safety at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

Traffic safety

All drivers were asked to evaluate both countries in terms of feelings of (in-)security, described as involving road rage, aggressive behaviour by others, gestures, etc.

Figure 7.2 shows the feeling of (in-)security in France and neighbouring countries. Almost two thirds of the drivers in France felt secure both during the day and at night. A fifth of the drivers felt more secure during the day. Six percent did not feel safe at all. The percentage of drivers in France who feel safe is comparable with the surrounding countries and the European average, except for Italy, where fewer than half the drivers feel safe both during the day and at night. One in six drivers on the Italian road network does not feel safe at all.

Figure 7.2 Feeling of (in-)security (percentages).



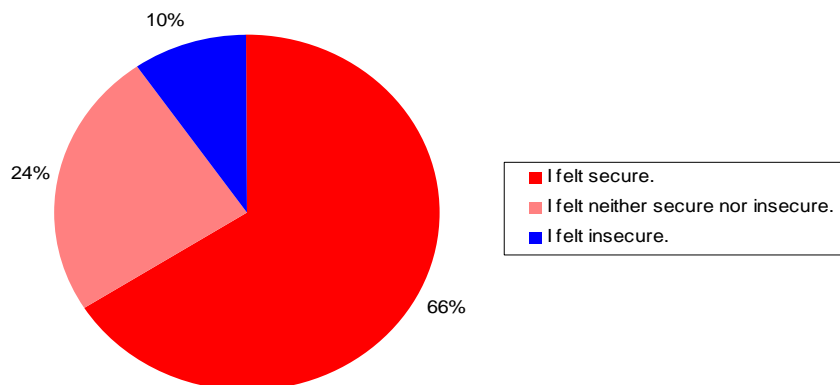
Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had, they were asked how safe they felt at these service or rest areas. Figure 7.3 shows how many people feel (in-)secure during their stop.

84 Percent of the users of the French network stopped at a service or rest area. In the neighbouring countries, too, more than 80 percent interrupted their trip at a service or rest area. 66 Percent of the drivers on the French network felt secure during their stop. About 24 percent of drivers felt neither secure nor insecure. In Italy 52 percent felt secure. The European average is 68 percent.

The difference between car and lorry drivers in France is worth noting. Half the lorry drivers felt safe during their stop at the French service or rest area while three-quarters of the car drivers felt safe during their stop.

Figure 7.3 Feeling of safety during a stop at a service or rest area.

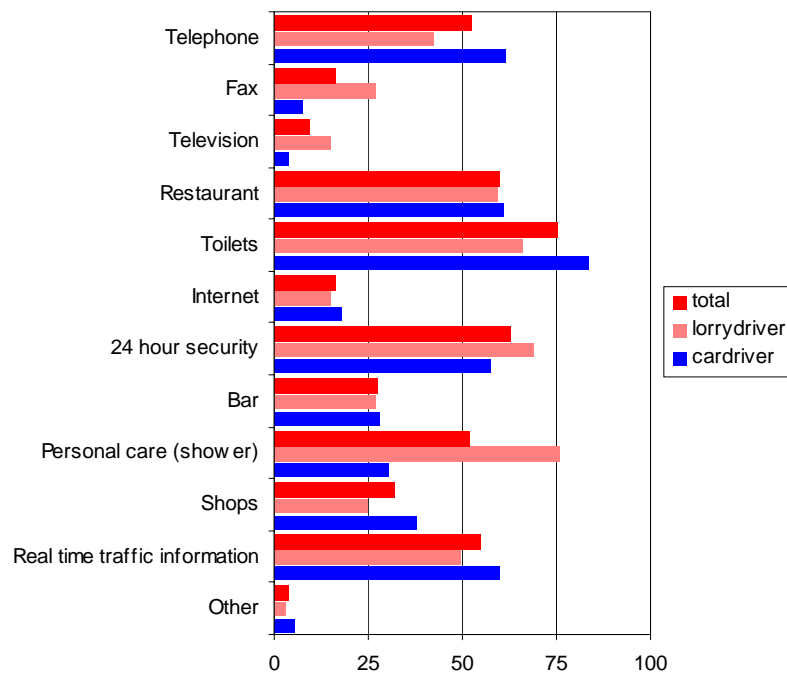


Facilities at rest areas

Besides the question about safety at rest areas, the drivers were asked about the facilities they expect at rest areas. Figure 7.4 shows which facilities the drivers expect at the rest areas in France. The results are split between lorry and car drivers.

Three quarters of the drivers expect a toilet at a rest area. More than half the drivers expect a telephone, a restaurant, 24-hour safety, personal care facilities and real time traffic information. Lorry drivers in particular expect personal care facilities at rest areas.

Figure 7.4 Facilities expected at rest areas; lorry and car drivers (percentages).



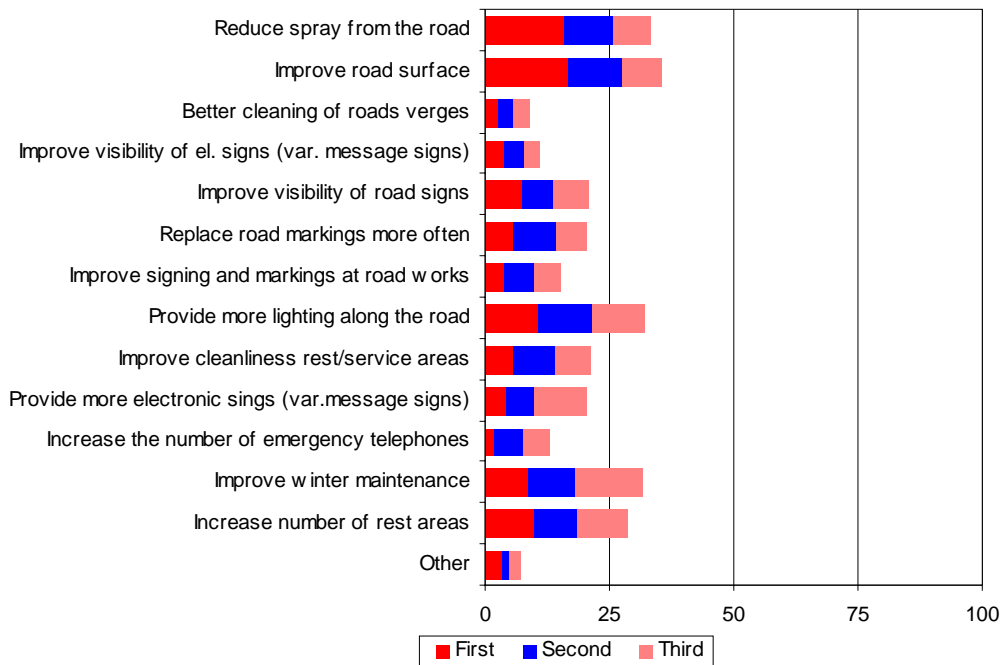
Enhancements to traffic safety and security

Opinions on what the authorities should do to enhance traffic safety and security are presented in figure 7.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

The quality of the road surface is considered to be main issue in France. This aspect is mentioned most overall. One in six drivers mention this enhancement, allocating it the highest priority. Other enhancements are reducing spray from the road, providing more lighting along the road, improving winter maintenance and increasing the number of rest areas.

'Improve road surface' is also mentioned most in the other surrounding countries.

Figure 7.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 7.5 shows the results of this statement for France and neighbouring countries. Half the drivers in France disagree with the statement. Maintenance is more important than the quality of the scenery to about a third of the drivers in France. In Italy and Spain more than two thirds of the drivers consider planting and landscape to be important (they disagree with the statement).

Table 7.5 "It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained" (percentages).

	I agree.	I neither agree nor disagree.	I disagree.
Belgium	21	30	50
England	39	15	47
France	33	15	52
Germany	25	20	55
Italy	27	9	65
Luxembourg	23	21	56
Spain	15	8	76
Switzerland	26	18	56
Europe	29	19	52

8. Luxembourg

8.1. Introduction

This chapter describes the results for Luxembourg, based on fieldwork conducted by Luxembourg. Table 8.1 shows the number of interviews per border and organising country.

Table 8.1 Number of interviews on which the results for Luxembourg are based.

border	organising country	
	Luxembourg	total
Luxembourg-Belgium	122	122
Luxembourg-Germany	160	160
Luxembourg-France	121	121
total	403	403

This chapter describes the results in three sections. Section 8.2 deals with satisfaction with road networks. Section 8.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 8.4.

8.2. Satisfaction with Luxembourg network

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

- visibility of markings on the road surface
- understandable and clear direction signs
- understandable and clear traffic signs
- quality of the road surface
- clear and understandable signing at road works
- provision of lighting on major roads
- availability of places to stop, such as service or rest areas
- cleanliness of service or rest areas
- security of places to stop.
- availability of variable message signs along major motorways
- cleanliness of the road

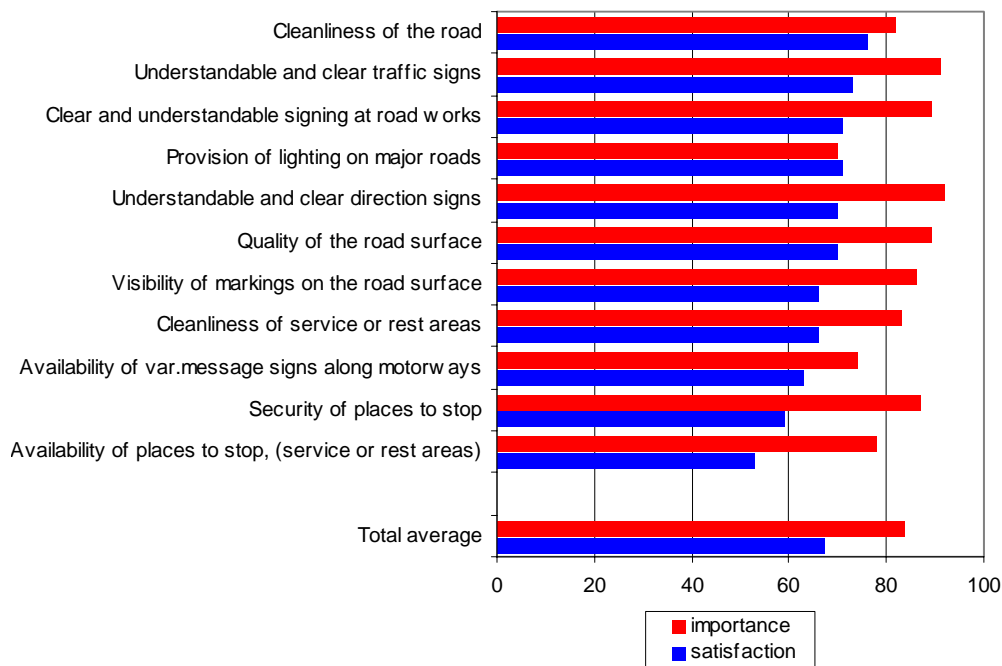
Satisfaction with and importance of aspects of the Luxembourg network

Figure 8.1 shows the level of satisfaction (percentage (extremely) satisfied) with the road network of Luxembourg. This figure also shows the importance of the several aspects (percentage (extremely) important). When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 8.1 show that the average scores of most of the elements included are considered very important (85 percent on average). Drivers on the Luxembourg network are of the opinion that the provision of lighting on major roads is the least important aspect of the Luxembourg network (70 percent think it is (very) important). Most important are clear and understandable direction and traffic signs (92 percent (very important)).

The drivers on the Luxembourg roads are most satisfied with the cleanliness of the road (76 percent), understandable and clear direction signs (73 percent), provision of lighting on major roads (71 percent) and clear and understandable signing at road works (71 percent). Fewer than two thirds are satisfied with the availability of places to stop (53 percent), security of places to stop (59 percent) and availability of variable message signs along motorways (63 percent). The gap between the level of importance and the level of satisfaction is the greatest for the security of places to stop.

Figure 8.1 Satisfaction and importance of aspects of the Luxembourg network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 8.1 shows the satisfaction with and importance of the aspects of the Luxembourg network, split between lorry and car drivers.

On average there is only a small difference between the importance of the several aspects. Both groups think that, on average, most aspects are (very) important. Car drivers are more satisfied with the availability of places to stop and the security of such places. Lorry drivers are more satisfied with the availability of variable message signs along major motorways.

Table 8.1 Satisfaction with and importance of aspects of the Luxembourg network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	76	82	6	76	89	13	66	86	20
understandable and clear direction signs	71	88	17	70	96	26	70	92	22
understandable and clear traffic signs	72	89	17	74	94	20	73	91	18
quality of the road surface	67	84	17	72	93	21	70	89	19
clear and understandable signing at road works	69	85	16	73	92	19	71	89	18
provision of lighting on major roads	71	67	-4	70	73	3	71	70	-1
availability of places to stop, such as service or rest areas	38	82	44	67	75	8	53	78	25
cleanliness of service or rest areas	66	80	14	66	86	20	66	83	17
security of places to stop.	57	83	26	62	90	28	59	87	28
availability of var. message signs along major motorways	66	70	4	61	78	17	63	74	11
cleanliness of the road	74	78	4	77	85	8	76	82	6
total average	66	81	15	70	86	17	67	84	17

s: percentage (very) satisfied

i: percentage (very) important

g: gap between importance and satisfaction

Luxembourg compared with neighbouring countries

It is interesting to see if the satisfaction with and the importance of the eleven aspects of the Luxembourg road network are comparable with neighbouring countries. Table 8.2 shows the satisfaction with and importance of the aspects for Luxembourg compared with Belgium, France and Germany.

Two thirds of drivers in Luxembourg (67 percent) are on average satisfied with the aspects of the network. Fewer drivers are satisfied in the neighbouring countries Belgium and Germany. In France 72 percent are satisfied on average.

In Luxembourg drivers are most satisfied with the cleanliness of the road, while in Belgium most are satisfied with the provision of lighting on major roads. In France the cleanliness as well as the quality of the road surface are very satisfactory. Understandable and clear directions signs is the aspect in Germany that gets the highest score (68 percent satisfied).

In Luxembourg and the neighbouring countries the several aspects are considered more or less equally important (between 80 and 90 percent on average).

Table 8.2 Satisfaction with and importance of the aspects of the Luxembourg and surrounding networks.

	Luxembourg		Belgium		France		Germany	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	66	86	38	81	79	91	61	90
understandable and clear direction signs	70	92	44	81	77	95	68	94
understandable and clear traffic signs	73	91	51	81	78	94	67	93
quality of the road surface	70	89	18	81	81	93	40	91
clear and understandable signing at road works	71	89	40	89	77	91	64	91
provision of lighting on major roads	71	70	82	72	61	78	42	66
availability of places to stop, such as service or rest areas	53	78	50	71	73	83	59	80
cleanliness of service or rest areas	66	83	41	77	65	86	53	85
security of places to stop.	59	87	48	86	56	88	55	88
availability of var. message signs along major motorways	63	74	35	72	68	77	50	68
cleanliness of the road	76	82	42	75	82	81	66	79
total average	67	84	44	79	72	87	57	84

s: percentage (very) satisfied

i: percentage (very) important

8.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delay: Had the driver experienced a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Table 8.3 first shows us the proportion of drivers who planned their trip. About 77 percent of the drivers in Luxembourg planned their trip. This is comparable with the neighbouring countries, except for Belgium (where 68 percent of the drivers planned their trip). Second, table 8.3 shows us how many drivers used traffic information. About a third of the drivers on the Luxembourg network used pre-trip traffic information (European average 33 percent). Drivers on the networks of Luxembourg, Germany and France often stated that the pre-trip information was reliable and useful (between 80 and 90 percent). In Belgium three quarters of the drivers judged the pre-trip traffic information to be reliable and useful.

Almost one third of the drivers on the Luxembourg network used on-trip traffic information. In Germany, 35 percent of the drivers used on-trip traffic information. Most of the drivers in the countries shown (80 percent or more) judged the on-trip traffic information to be reliable. Except for Belgium, more than 80 percent also found the on-trip traffic information useful.

Table 8.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre-trip				on-trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Belgium	68	37	73	74	29	87	73
France	76	35	91	91	29	93	93
Germany	73	32	85	82	35	85	81
Luxembourg	77	38	88	92	26	88	96
Europe	72	33	86	87	31	88	85

Delays

In response to the question whether they had experienced delay and if so, what caused it, on average 40 percent of the drivers did report delays (table 8.4). In Luxembourg and Belgium half the drivers reported delays. The most frequently reported causes of delays on the Luxembourg network (based on all respondents) are road works (71 percent), delay (52 percent) and congestion (51 percent). In Belgium and Germany, too, road works cause most of the delays.

Table 8.4 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
Belgium	51	52	77	21	8	6
France	27	60	29	23	10	11
Germany	47	56	65	22	11	13
Luxembourg	52	51	71	18	5	3
Europe	40	59	53	18	9	9

8.4. Safety

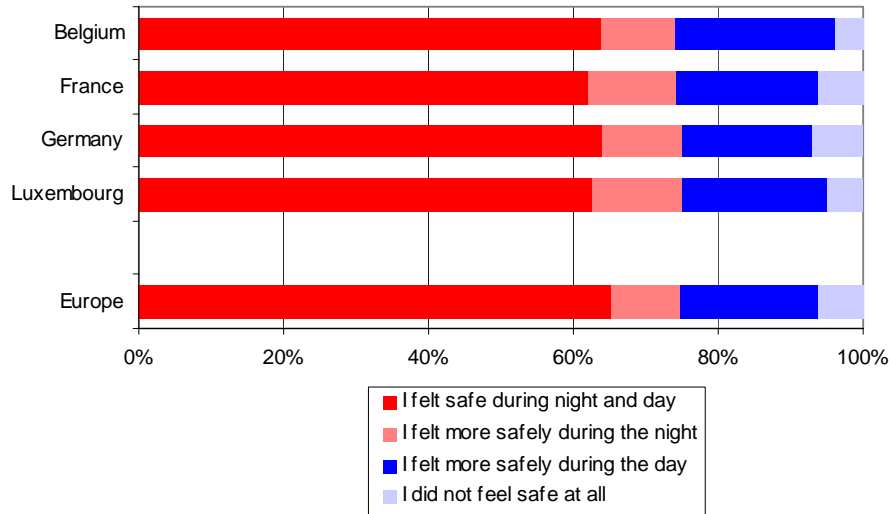
Drivers were asked questions about traffic safety and their perception of safety at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

Traffic safety

All drivers were asked to evaluate both countries in terms of feelings of (in-) security, described as involving road rage, aggressive behaviour by others, gesturing etc.

Figure 8.2 shows the feeling of (in-) security in Luxembourg and neighbouring countries. Almost two thirds of the drivers in Luxembourg felt secure both during the day and at night. A fifth of the drivers felt more secure during the day. Five percent did not feel safe at all. The percentage of the drivers in Luxembourg who feel safe is comparable with the surrounding countries and the European average.

Figure 8.2 Feeling of (in-) security (percentages).



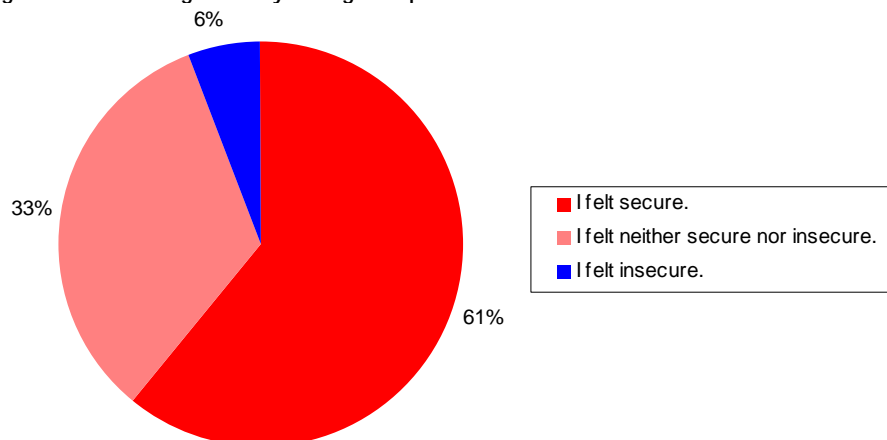
Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had interrupted their trip, they were asked about their feeling of safety at such areas. Figure 8.3 shows how many people felt (in-)secure during their stop.

93 Percent of the users of the Luxembourg network interrupted their trip at a service or rest area. In the neighbouring countries, too, more than 80 percent stopped at a service or rest area. 61 Percent of the drivers on the Luxembourg network felt secure during their stop. About 33 percent of the drivers felt neither secure nor insecure. In Belgium 71 percent felt secure. The European average is 68 percent.

The difference between car and lorry drivers in Luxembourg is worth noting. Half (55 percent) of the lorry drivers felt safe during their stop at the Luxembourg service or rest area while 66 percent of the car drivers felt safe during their stop.

Figure 8.3 Feeling of safety during a stop at a service or rest area.

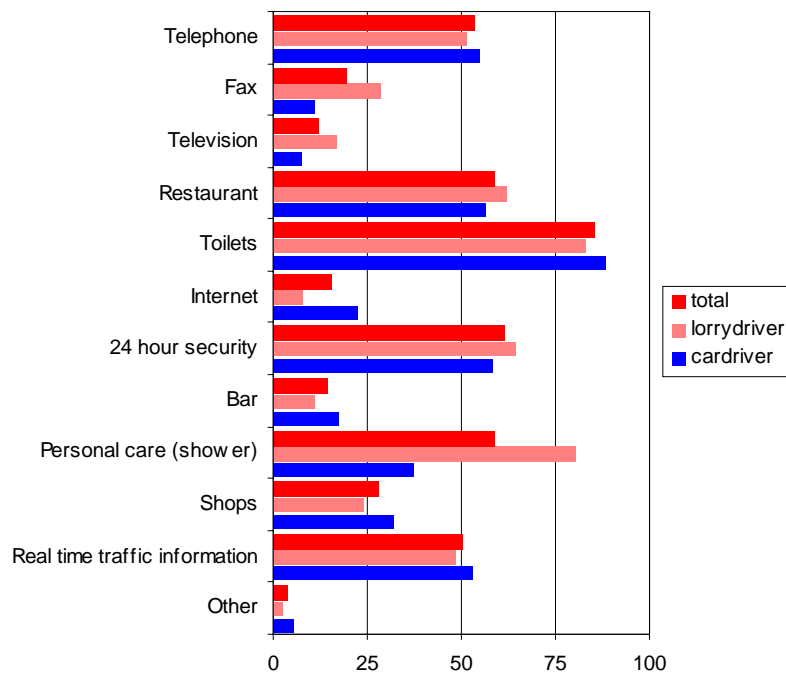


Facilities at rest areas

Besides the question about safety at rest areas, the drivers were asked about the facilities they expect at rest areas. Figure 8.4 shows which facilities the drivers expect at the rest areas in Luxembourg. The results are split between lorry and car drivers.

Over three-quarters of the drivers expect a toilet at a rest area. More than half the drivers expect a telephone, a restaurant, 24-hour safety, personal care facilities and real time traffic information. Lorry drivers in particular expect personal care facilities at rest areas.

Figure 8.4 Facilities expected at rest areas; lorry and car drivers (percentages).



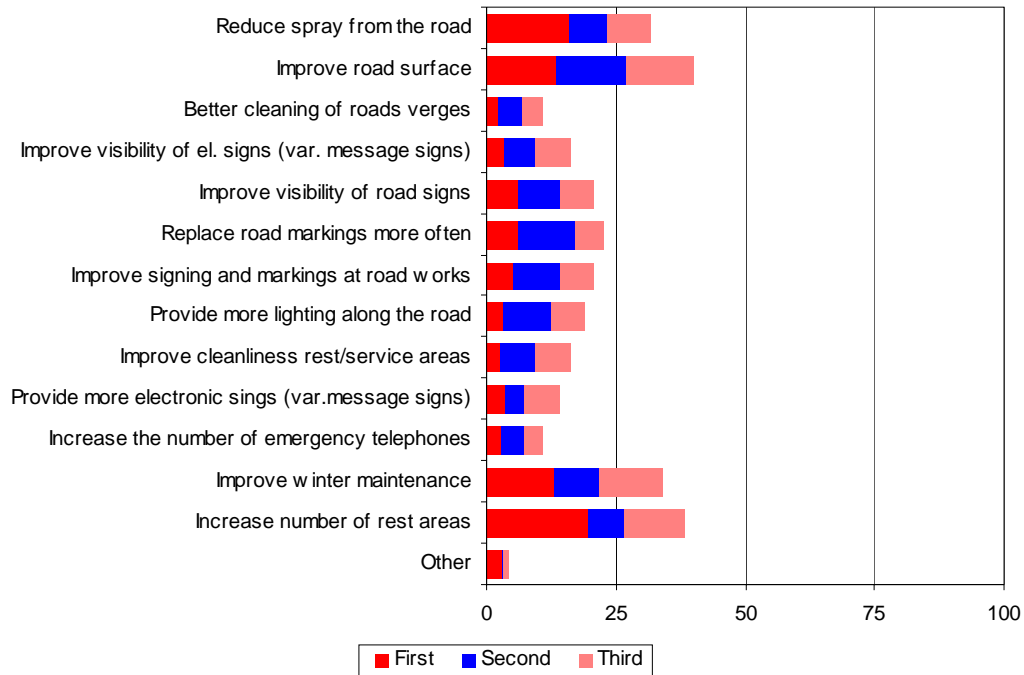
Enhancements to traffic safety and security

Opinions on what the authorities should do to enhance traffic safety and security are presented in figure 8.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

The quality of the road surface is considered to be main issue in Luxembourg. This aspect is mentioned most. Another main issue in Luxembourg is the number of rest areas, which should be increased. One in five drivers mention 'increasing the number of rest areas' as the highest priority. Other enhancements are reducing spray from the road and improving winter maintenance.

'Improve road surface' is mentioned most in the other surrounding countries.

Figure 8.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final questions the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 8.5 shows the results of this statement for Luxembourg and neighbouring countries. Half the drivers in Luxembourg disagree with the statement (56 percent). Maintenance is more important than the quality of the scenery to about a quarter of the drivers in Luxembourg. The scores for Luxembourg are comparable with the surrounding countries and the European average.

Table 8.5 "It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained." (percentages).

	I agree.	I neither agree nor disagree.	I disagree.
Belgium	21	30	50
France	33	15	52
Germany	25	20	55
Luxembourg	23	21	56
Europe	29	19	52

9. Ireland

9.1. Introduction

This chapter describes the results for Ireland, based on fieldwork conducted by Ireland, England and France. Table 9.1 shows the number of interviews per border and organising country.

Table 9.1 Number of interviews on which the results for Ireland are based.

border	organising country			
	England	Ireland	France	total
Ireland-England	83	302		385
Ireland-France			167	167
total	183	302	167	552

This chapter describes the results in three sections. Section 9.2 deals with satisfaction with road networks. Section 9.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 9.4.

9.2. Satisfaction with Irish network

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

-
- visibility of markings on the road surface
 - understandable and clear direction signs
 - understandable and clear traffic signs
 - quality of the road surface
 - clear and understandable signing at road works
 - provision of lighting on major roads
 - availability of places to stop, such as service or rest areas
 - cleanliness of service or rest areas
 - security of places to stop.
 - availability of variable message signs along major motorways
 - cleanliness of the road
-

Satisfaction with and importance of aspects of the Irish network

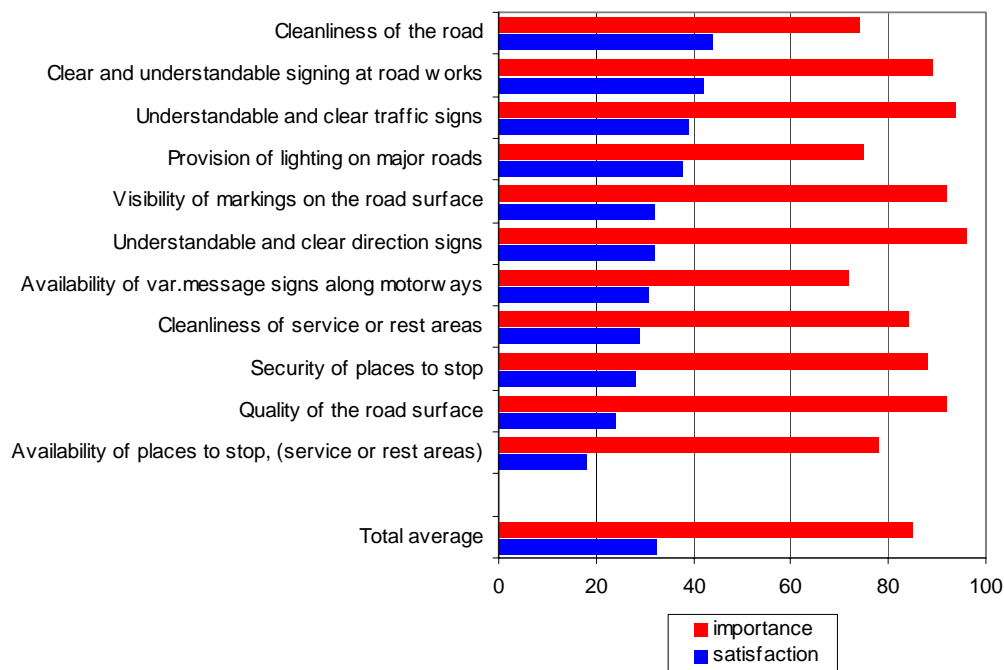
Figure 9.1 shows the level of satisfaction (percentage (extremely) satisfied) with the road network in Ireland. This figure also shows the importance of the several aspects (percentage (extremely) important).

When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 9.1 show that the average scores of most of the elements included are considered very important (85 percent on average). Drivers on the Irish network are of the opinion that the availability of variable message signs along motorways is the least important aspect of the Irish network (72 percent think it is (very) important). Most important are clear and understandable direction signs (96 percent).

The drivers on the Irish roads are most satisfied with the cleanliness of the road (44 percent). Fewer than half the drivers are satisfied with the other aspects of the Irish road network. The quality of the road surface and the availability of places to stop is satisfactory to a quarter of the drivers. The gap between the level of importance and the level of satisfaction is greatest for the quality of the road surface. More than 90 percent think this is an important aspect. A quarter are satisfied with the quality of the road surface, though.

Figure 9.1 Satisfaction with and importance of aspects of the Irish network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 9.1 shows the satisfaction with and importance of the aspects of the Irish network, split between lorry and car drivers.

On average car drivers are more satisfied (35 percent) than lorry drivers (30 percent), but the satisfaction ratings are generally relatively low. Both groups think that, on average, most aspects are (very) important (at least 70 percent).

Car drivers are more satisfied with the security of places to stop, the visibility of markings on the road surface and the cleanliness of the road.

Table 9.1 Satisfaction with and importance of aspects of the Irish network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	21	92	71	40	92	52	32	92	60
understandable and clear direction signs	33	94	61	32	97	65	32	96	64
understandable and clear traffic signs	38	91	53	40	97	57	39	94	55
quality of the road surface	22	90	68	26	94	68	24	92	68
clear and understandable signing at road works	39	92	53	44	87	43	42	89	47
provision of lighting on major roads	37	80	43	38	71	33	38	75	37
availability of places to stop, such as service or rest areas	21	90	69	17	70	53	18	78	60
cleanliness of service or rest areas	26	88	62	32	82	50	29	84	55
security of places to stop.	18	90	72	35	86	51	28	88	60
availability of var. message signs along major motorways	34	78	44	29	68	39	31	72	41
cleanliness of the road	40	81	41	47	68	21	44	74	30
total average	30	88	58	35	83	48	32	85	52

s: percentage (very) satisfied i: percentage (very) important g: gap between importance and satisfaction

Ireland compared with England and France

It is interesting to see if the satisfaction and the importance of the eleven aspects of the Irish road network are comparable with neighbouring countries. Table 9.2 displays the satisfaction with and importance of the aspects for Ireland, compared with England and France.

A third of drivers in Ireland (35 percent) are on average satisfied with the aspects of the network. In England, on average 61 percent of the drivers are satisfied with the road network. In France 72 percent of the drivers are satisfied with the road network. The drivers in Ireland are less satisfied than those in England, especially in regard to understandable and clear direction and traffic signs. In Ireland only a third are satisfied with these two aspects, while in England more than 75 percent of drivers are satisfied. In France more than two third of the drivers are satisfied with the cleanliness of the places to stop. In Ireland and England one third of the drivers are satisfied with this aspect.

In Ireland, England and France several aspects are considered to be equally important (85 percent on average).

Table 9.2 Satisfaction with and importance of the aspects of the Irish and surrounding networks.

	Ireland		England		France	
	s	i	s	i	s	i
visibility of markings on the road surface	32	92	78	89	79	91
understandable and clear direction signs	32	96	80	96	77	95
understandable and clear traffic signs	39	94	77	94	78	94
quality of the road surface	24	92	59	91	81	93
clear and understandable signing at road works	42	89	71	91	77	91
provision of lighting on major roads	38	75	72	78	61	78
availability of places to stop, such as service or rest areas	18	78	49	79	73	83
cleanliness of service or rest areas	29	84	35	83	65	86
security of places to stop	28	88	34	87	56	88
availability of var. message signs along major motorways	31	72	59	73	68	77
cleanliness of the road	44	74	59	72	82	81
total average	32	85	61	85	72	87

s: percentage (very) satisfied

i: percentage (very) important

9.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delay: Had the driver experienced a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Table 9.3 first shows us the proportion of drivers who planned their trip. About 83 percent of the drivers in Ireland planned their trip, in contrast to England, where 67 percent of drivers planned their trip (France 67 percent). Second, table 9.3 shows us how many drivers used traffic information. About a quarter of the drivers on the Irish and English networks used pre-trip traffic information. This is below the European average of 33 percent. Drivers on the networks of Ireland, England and France often said that the pre-trip information was reliable. The same holds for the usefulness of pre-trip traffic information. In Ireland more than 95 percent of the drivers are of the opinion that the pre-trip traffic information was useful.

About a quarter used on-trip traffic information. Most of the drivers (80 percent or more) judge the on-trip traffic information to be reliable and useful.

Table 9.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre trip				on -trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Ireland	83	28	93	97	25	95	97
France	76	35	91	91	29	93	93
England	67	27	87	88	29	87	85
Europe	72	33	86	87	31	88	85

Delays

In answer to the question whether they had experienced delay and if so, what caused it, on average 40 percent of the drivers did report delays (table 9.4). In England and Ireland almost half the drivers reported delays. In France a quarter of the drivers (27 percent) experienced delay. The most frequently reported causes of delays on the Irish network (based on all respondents) are congestion (68 percent) and road works (62 percent). Congestion also caused delays in Ireland. Furthermore, in Ireland 21 percent mentioned weather conditions as a cause of their delay. In England most delays are caused by congestion and road works.

Table 9.4 Percentage of drivers with delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
Ireland	49	68	62	8	21	13
France	27	60	29	23	10	11
England	48	56	45	18	14	12
Europe	40	59	53	18	9	9

9.4. Safety

Drivers were asked questions about traffic safety and their perception of safety at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

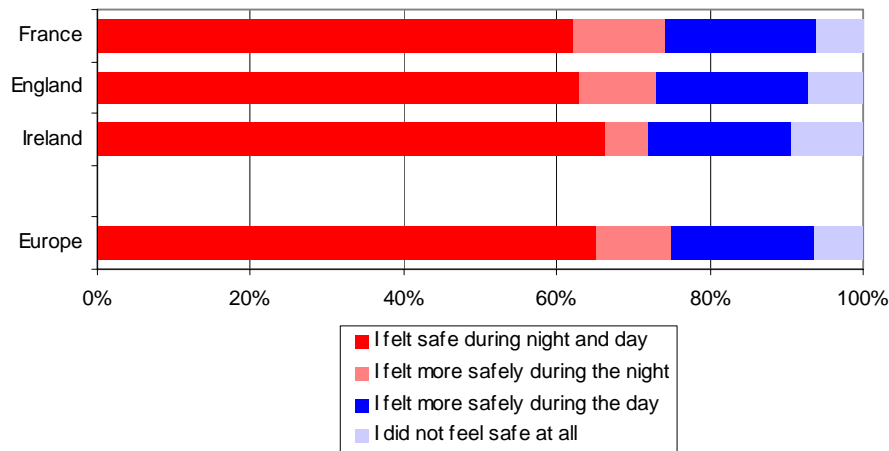
Traffic safety

All drivers were asked to evaluate both countries in terms of feelings of (in-)security, described as involving road rage, aggressive behaviour by others, gesturing etc.

Figure 9.2 shows the feeling of (in-)security in England, Ireland and France. Two thirds of the drivers in Ireland felt secure both during the day and at night. A fifth of the drivers felt more secure during the day. Nine percent did not feel safe at all. The percentage of drivers in Ireland who feel safe is comparable with England, France and the European average.

The difference between car and lorry drivers in Ireland is worth noting. Half the lorry drivers (59 percent) felt safe during their stop at the English service or rest area, while three quarters (72 percent) of the car drivers felt safe during their stop.

Figure 9.2 Feeling of (in-) security (percentages).

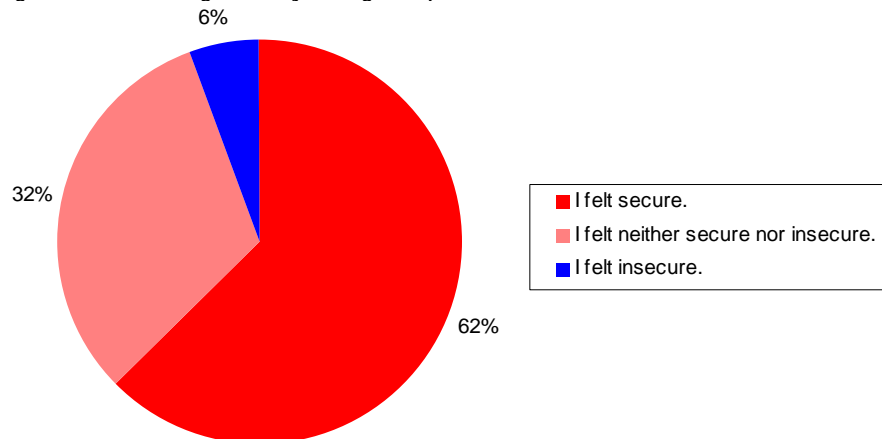


Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had interrupted their journey they were asked how safe they felt at these service or rest areas. Figure 9.3 shows how many people feel (in-) secure during their stop.

56 Percent of the users of the Irish network had stopped at a service or rest area. More people (73 percent) interrupted their trip in England. 62 Percent of the drivers on the Irish network felt secure during their stop. About 32 percent of the drivers felt neither secure nor insecure. In England 59 percent felt secure, while the European average is 68 percent.

Figure 9.3 Feeling of safety during a stop at a service or rest area.



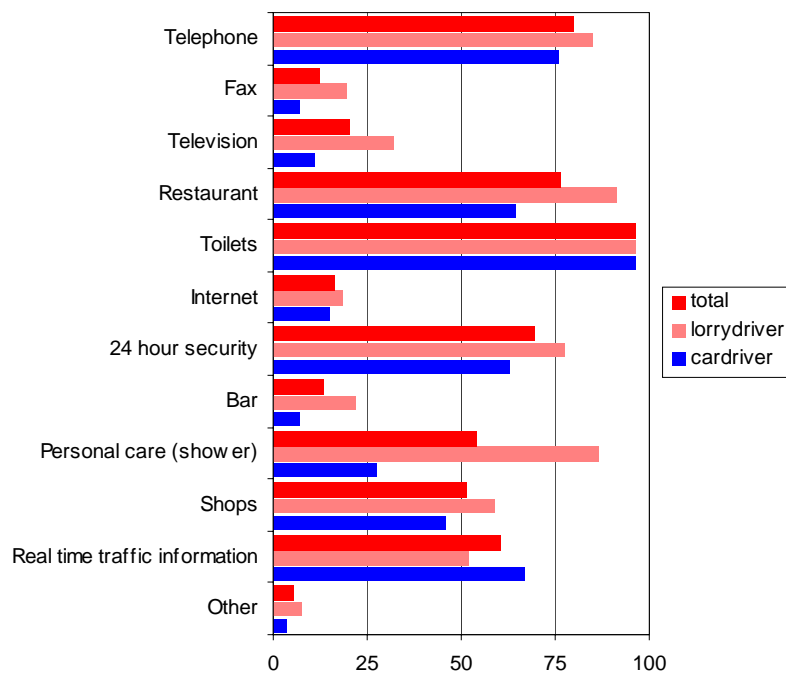
Facilities at rest areas

Besides the question about safety at rest areas the drivers were asked about the facilities they expect at rest areas. Figure 9.4 shows which facilities the drivers expect at the rest areas in England. The results are split between lorry and car drivers.

Almost all drivers (> 95 percent) expect a toilet at a rest area. More than 70 percent of the drivers expect a telephone and a restaurant. Lorry drivers in particular expect personal care facilities at rest areas.

They also mention a restaurant more frequently as a facility they expect at rest areas. Car drivers are more interested than lorry drivers in real time traffic information.

Figure 9.4 Facilities expected at rest areas; lorry and car drivers (percentages).



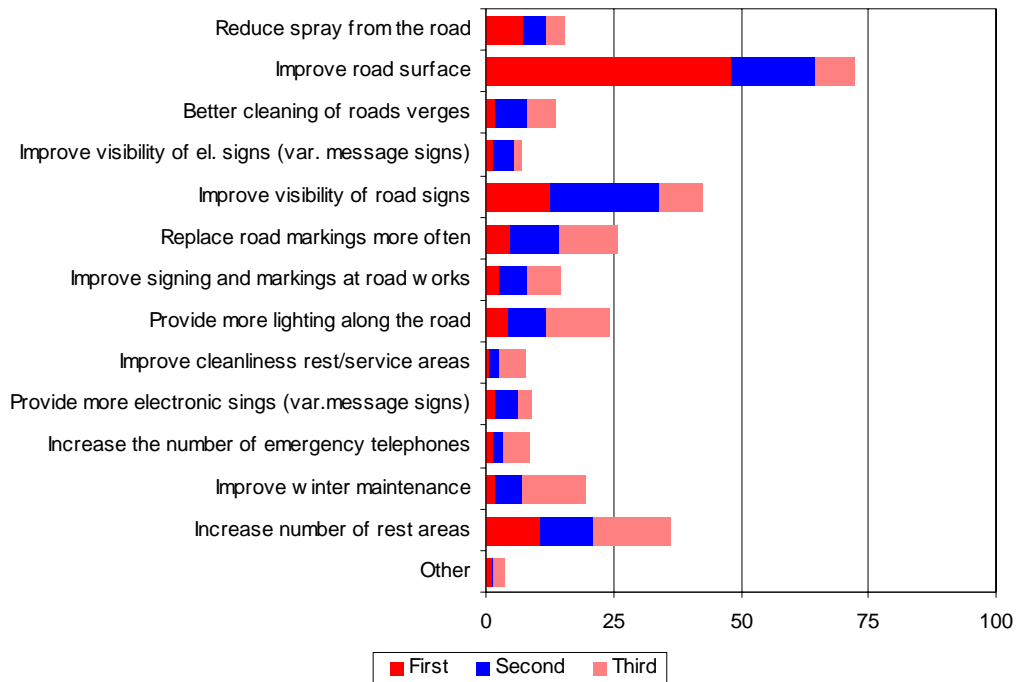
Enhancements to traffic safety and security

Opinions on what the authorities should do to enhance traffic safety and security are presented in figure 9.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

The quality of the road surface is considered to be main issue in Ireland. This aspect is mentioned most overall. Half the drivers mention this enhancement, allocating it the highest priority. Other enhancements are improvement of the visibility of road signs and increasing the number of rest areas.

'Improve road surface' is also most frequently mentioned in England. Other enhancements mentioned by the drivers on the English network are 'reduce spray from the road' and 'increase number of rest areas'.

Figure 9.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 9.5 shows the results of this statement for England, France and Ireland. Half the drivers in England, Ireland and France disagree with the statement. For about 40 percent of the drivers of England and Ireland, maintenance is more important than the quality of the scenery. In France this percentage is 33.

Table 9.5 "It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained' (percentages).

	I agree.	I neither agree nor disagree.	I disagree.
England	39	15	47
France	33	15	52
Ireland	37	15	48
Europe	29	19	52

10. The Netherlands

10.1. Introduction

This chapter describes the results for The Netherlands, based on fieldwork conducted by The Netherlands. Table 10.1 shows the number of interviews per border and organising country.

Table 10.1 Number of interviews on which the results for The Netherlands are based.

Border	organising country	
	Netherlands	total
The Netherlands -Germany	204	204
The Netherlands-Belgium	200	200
The Netherlands-England	205	205
total	609	609

This chapter describes the results in three sections. Section 10.2 deals with satisfaction with road networks. Section 10.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 10.4.

10.2. Satisfaction with Dutch network

The study included statements to measure the degree of satisfaction and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

- visibility of markings on the road surface
- understandable and clear direction signs
- understandable and clear traffic signs
- quality of the road surface
- clear and understandable signing at road works
- provision of lighting on major roads
- availability of places to stop, such as service or rest areas
- cleanliness of service or rest areas
- security of places to stop.
- availability of variable message signs along major motorways
- cleanliness of the road

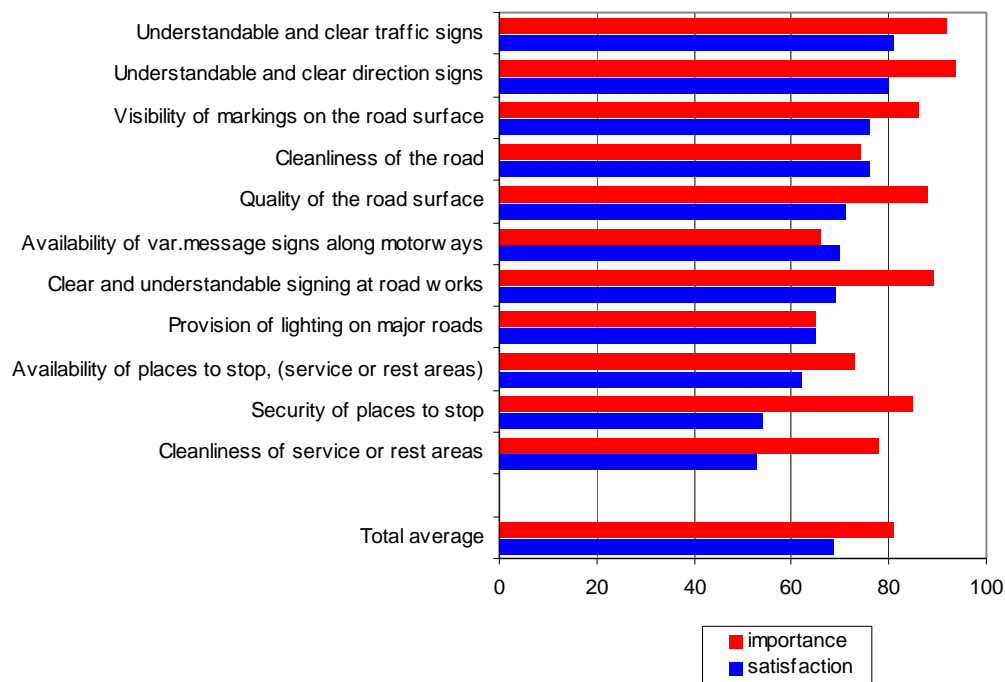
Satisfaction with and importance of aspects of the Dutch network

Figure 10.1 shows the level of satisfaction (percentage (extremely) satisfied) with the road network in The Netherlands. The figure also shows the importance of the several aspects (percentage (extremely) important). When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 10.1 show that the average scores of the elements included are all considered very important (between 70 and 90 percent). Drivers on the Dutch network are of the opinion that the provision of lighting on major roads is the least important aspect of the Dutch network (65 percent think it is (very) important). Most important are clear and understandable direction signs (94 percent).

Drivers on the Dutch roads are most satisfied with understandable and clear direction and traffic signs (80 percent satisfied). Half the drivers are satisfied with the cleanliness of service areas and the security of places to stop. The gap between the level of importance and the level of satisfaction is the greatest for this last aspect.

Figure 10.1 Satisfaction with and importance of aspects of the Dutch network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 10.1 shows the satisfaction with and importance of the aspects of the Dutch network, split between lorry and car drivers.

On average car drivers are a little more satisfied (71 percent) than lorry drivers (66 percent). Both groups think that, on average, all aspects are (very) important (around 80 percent).

Car drivers are more satisfied with the quality of the road surface and the availability of places to stop, while the availability of places to stop is more important for lorry drivers.

Table 10.1 Satisfaction with and importance of aspects of the Dutch network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	74	82	8	77	91	14	76	86	10
understandable and clear direction signs	82	91	9	77	96	19	80	94	14
understandable and clear traffic signs	81	90	9	82	95	13	81	92	11
quality of the road surface	64	85	21	79	92	13	71	88	17
clear and understandable signing at road works	72	86	14	66	91	25	69	89	20
provision of lighting on major roads	62	64	2	69	67	-2	65	65	0
availability of places to stop, such as service or rest areas	54	81	27	70	65	-5	62	73	11
cleanliness of service or rest areas	52	76	24	53	80	27	53	78	25
security of places to stop.	50	82	32	59	88	29	54	85	31
availability of var. message signs along major motorways	67	65	-2	73	66	-7	70	66	-4
cleanliness of the road	72	72	0	80	75	-5	76	74	-2
total average	66	79	13	71	82	11	69	81	12

s: percentage (very) satisfied i: percentage (very) important g: gap between importance and satisfaction

The Netherlands compared with neighbouring countries

It is interesting to see if the satisfaction with and the importance of the eleven aspects of the Dutch road network are comparable with neighbouring countries. Table 10.2 displays the satisfaction with and importance of the aspects for The Netherlands, compared with Belgium, Germany and England.

On average, about two thirds of drivers in The Netherlands (69 percent) are satisfied with the aspects of the network. Fewer drivers are satisfied in the neighbouring countries. In England an average of 61 percent are satisfied; while in Belgium and Germany 44 and 57 percent are satisfied, respectively. In the Netherlands around 70 percent are satisfied with the quality of the road surface. This percentage is lower in Belgium and Germany. The provision of lighting on major roads is the only aspect with which drivers in Belgium are more satisfied than in the other countries.

On average, the importance of the aspects in the four countries compared is the same. Somewhere between 70 and 90 percent of the drivers say that the various aspects are (very) important.

Table 10.2 Satisfaction with and importance of the aspects of the Dutch, Belgian, German and English network.

	The Neth.		Belgium		Germany		England	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	76	86	38	81	61	90	78	89
understandable and clear direction signs	80	94	44	81	68	94	80	96
understandable and clear traffic signs	81	92	51	81	67	93	77	94
quality of the road surface	71	88	18	81	40	91	59	91
clear and understandable signing at road works	69	89	40	89	64	91	71	91
provision of lighting on major roads	65	65	82	72	42	66	72	78
availability of places to stop, such as service or rest areas	62	73	50	71	59	80	49	79
cleanliness of service or rest areas	53	78	41	77	53	85	35	83
security of places to stop.	54	85	48	86	55	88	34	87
availability of var. message signs along major motorways	70	66	35	72	50	68	59	73
cleanliness of the road	76	74	42	75	66	79	59	72
total average	69	81	44	79	57	84	61	85

s: percentage (very) satisfied

i: percentage (very) important

10.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delays: Had the driver experienced a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Table 10.3 first shows the proportion of drivers who planned their trip. About 76 percent of drivers in The Netherlands planned their trip. This is a little higher than the proportion of drivers who planned their trip in the surrounding countries. Second, table 10.3 shows how many drivers used traffic information. About one third of the drivers on the networks shown used pre-trip traffic information. Drivers on the networks of England, Germany and the Netherlands frequently stated that the pre-trip information was reliable. The same holds for the usefulness of pre-trip traffic information. In Belgium three quarters of the drivers are of the opinion that the pre-trip traffic information was useful. This percentage is higher in the neighbouring countries.

About a third use on-trip traffic information (42 percent in the Netherlands). Most of the drivers (80 percent or more) judge the on-trip traffic information to be reliable and useful.

Table 10.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre trip				on -trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Belgium	68	37	73	74	29	87	73
England	67	27	87	88	29	87	85
Germany	73	32	85	82	35	85	81
The Netherlands	76	27	89	91	42	90	80
Europe	72	33	86	87	31	88	85

Delays

In response to the question whether they had experienced delay and what caused it, on average 40 percent of the drivers did report delays (table 10.4). In the Netherlands 42 percent of the drivers reported a delay. More than half the drivers in Belgium experienced delay. The most commonly reported causes of delays on the Dutch network (based on all respondents) are congestion (70 percent) and road works (47 percent). Road works causes most of the delays in Germany and Belgium.

Table 10.4 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
Belgium	51	52	77	21	8	6
England	48	56	45	18	14	12
Germany	47	56	65	22	11	13
Netherlands	42	70	47	10	4	1
Europe	40	59	53	18	9	9

10.4. Safety

Drivers were asked questions about traffic safety and their perception of safety at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

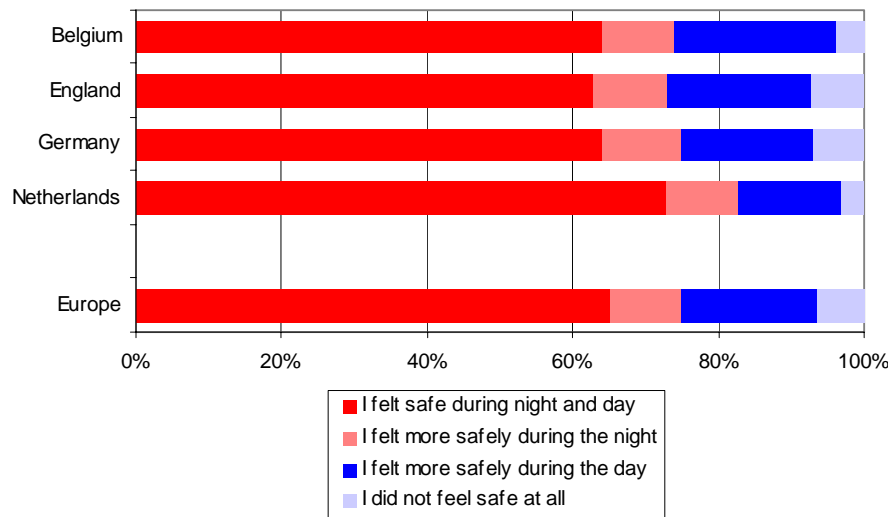
Traffic safety

All drivers were asked to evaluate both countries in terms of feelings of (in-)security, described as involving road rage, aggressive behaviour by others, gesturing etc.

Figure 10.2 shows the feeling of (in-)security for The Netherlands and neighbouring countries. Three quarters of the drivers in The Netherlands felt secure both during the day and at night. About 14 percent of the drivers felt more secure during the day. Fewer than five percent did not feel safe at all.

The percentage of drivers in The Netherlands who feel safe is higher than the neighbouring countries and is above the European average of 65 percent.

Figure 10.2 Feeling of (in-) security (percentages).

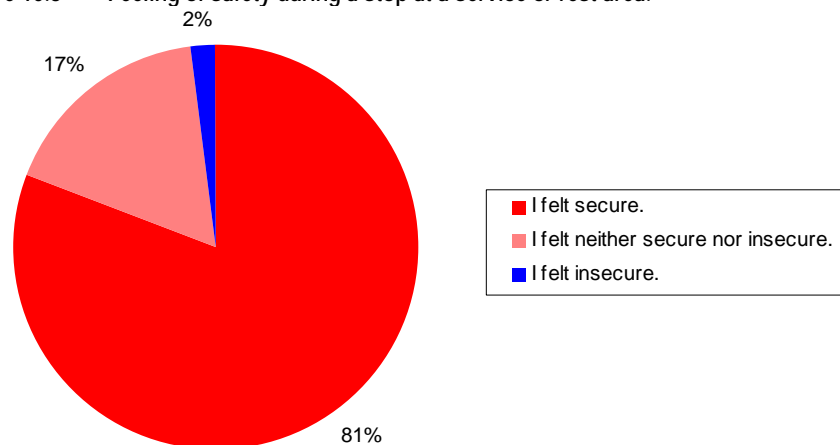


Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had interrupted their trip they were asked how safe they felt at the service or rest areas. Figure 10.3 shows how many people feel (in-) secure during their stop.

67 Percent of the users of the Dutch network stopped at a service or rest area. Even more people interrupted their trip in Belgium (84 percent). Over three-quarters of the drivers on the Dutch network felt secure during their stop. About 17 percent of the drivers felt neither secure nor insecure. Fewer drivers in England felt secure (59 percent).

Figure 10.3 Feeling of safety during a stop at a service or rest area.

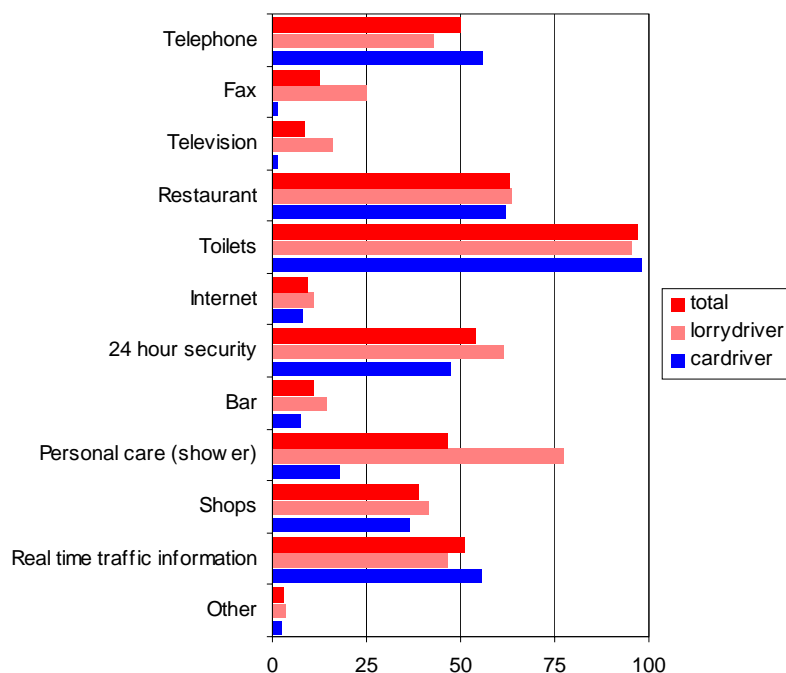


Facilities at rest areas

Besides the question about the safety at rest areas, the drivers were asked about the facilities they expect at rest areas. Figure 10.4 shows which facilities the drivers expect at the rest areas in The Netherlands. The results are split between lorry and car drivers.

Over 90 percent of the drivers expect a toilet at a rest area. Half the drivers also expect a telephone, a restaurant, 24-hour security, 'personal care facilities' like a shower (especially lorry drivers) and real time traffic information.

Figure 10.4 Facilities expected at rest areas; lorry and car drivers (percentages).



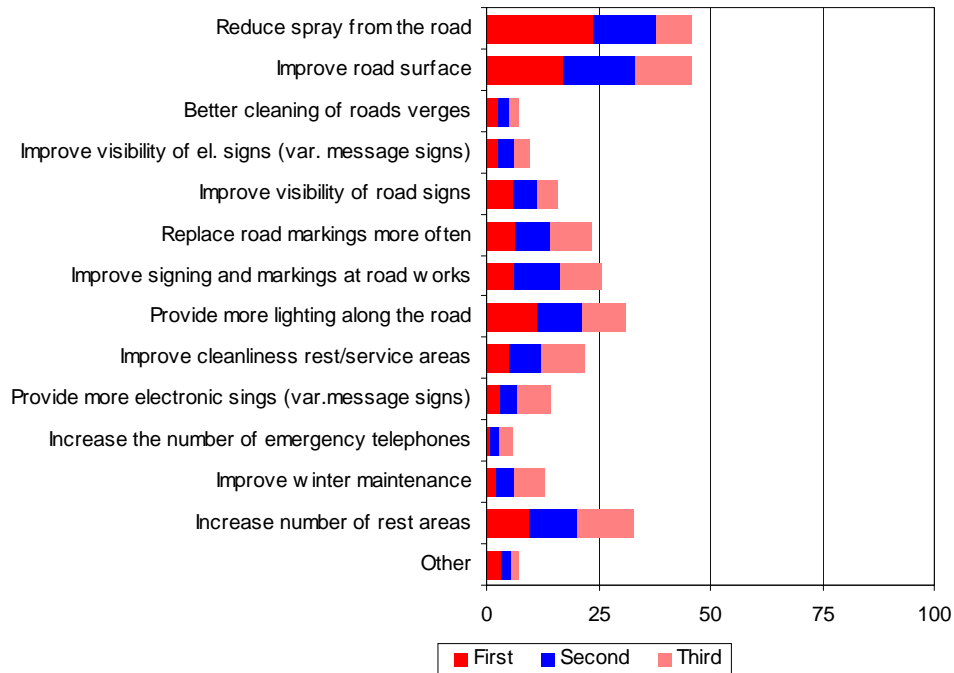
Enhancements to traffic safety and security

Opinions on what the authorities should do to enhance traffic safety and security are presented in figure 10.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

In the Netherlands there are two main issues: reduce spray from the road and improve the quality of the road surface. These aspects are mentioned most totally. A quarter of the drivers mention 'reduce spray from the road' as the highest priority. Another enhancement to traffic safety and security is the provision of more lighting along the road and increasing the number of rest areas.

'Reduce spray from the road' and 'improve road surface' are the enhancements that are also mentioned most in the neighbouring countries.

Figure 10.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 10.5 shows the results of this statement for The Netherlands and surrounding countries. Almost half the drivers in The Netherlands disagree with the statement. For them the scenery is also important. The same holds for the surrounding countries.

Table 10.5 "It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained." (percentages)

	I agree.	I neither agree nor disagree.	I disagree.
Belgium	21	30	50
England	39	15	47
Germany	25	20	55
Netherlands	32	24	45
Europe	29	19	52

11. Switzerland

11.1. Introduction

This chapter describes the results for Switzerland, based on fieldwork conducted by France and Switzerland. Table 11.1 shows the number of interviews per border and organising country.

Table 11.1 Number of interviews on which the results for Switzerland are based.

border	organising country		
	Switzerland	France	total
Switzerland-France		101	101
Switzerland-Italy	202		202
Switzerland-Germany	211		211
total	413	101	514

This chapter describes the results in three sections. Section 11.2 deals with satisfaction with road networks. Section 11.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 11.4.

11.2. Satisfaction with Swiss network

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

- visibility of markings on the road surface
- understandable and clear direction signs
- understandable and clear traffic signs
- quality of the road surface
- clear and understandable signing at road works
- provision of lighting on major roads
- availability of places to stop, such as service or rest areas
- cleanliness of service or rest areas
- security of places to stop.
- availability of variable message signs along major motorways
- cleanliness of the road

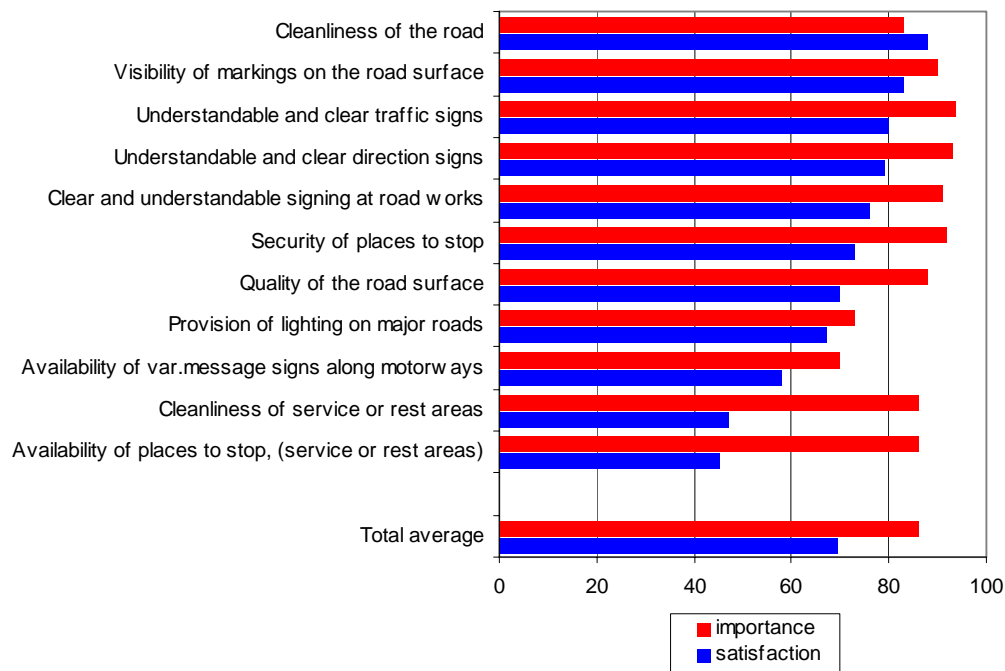
Satisfaction with and importance of aspects of the Swiss network

Figure 11.1 shows the level of satisfaction (percentage (extremely) satisfied) with the road network of Switzerland. This figure also shows the importance of the several aspects (percentage (extremely) important). When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

The importance ratings presented in figure 11.1 show that the average scores of most of the elements included are considered very important (85 percent on average). Drivers on the Swiss network are of the opinion that the availability of variable message signs along motorways is the least important aspect of the Swiss network (70 percent think it is (very) important). Most important are clear and understandable traffic signs (94 percent (very important)).

The drivers on the Swiss roads are most satisfied with the cleanliness of the road (88 percent are (very) satisfied). Fewer than half the drivers are satisfied with the availability of places to stop and the cleanliness of service or rest areas. The gap between the level of importance and the level of satisfaction is greatest for these two aspects, too.

Figure 11.1 Satisfaction with and importance of aspects of the Swiss network (percentages).



Difference between lorry and car drivers

Both lorry and car drivers were interviewed in the European Road User Survey 2004. Table 11.1 shows the satisfaction with and importance of the aspects of the Swiss network, split between lorry and car drivers.

On average there is only a small difference between the importance of the several aspects. Both groups think that, on average, most aspects are (very) important. Car drivers are more satisfied with the various aspects mentioned. The most prominent example is the availability of places to stop. More than two thirds of the car drivers are satisfied with the availability of place to stop, while just a quarter of the lorry drivers are satisfied with this aspect.

Table 11.1 Satisfaction with and importance of aspects of the Swiss network: lorry and car drivers.

	lorry drivers			car drivers			total		
	s	i	g	s	i	g	s	i	g
visibility of markings on the road surface	79	86	7	88	95	7	83	90	7
understandable and clear direction signs	74	90	16	85	97	12	79	93	14
understandable and clear traffic signs	75	92	17	86	98	12	80	94	14
quality of the road surface	67	84	17	75	94	19	70	88	18
clear and understandable signing at road works	72	89	17	80	94	14	76	91	15
provision of lighting on major roads	61	67	6	75	82	7	67	73	6
availability of places to stop, such as service or rest areas	27	89	62	69	83	14	45	86	41
cleanliness of service or rest areas	74	83	9	80	89	9	47	86	39
security of places to stop.	67	89	22	82	96	14	73	92	19
availability of var. message signs along major motorways	58	65	7	59	77	18	58	70	12
cleanliness of the road	86	81	-5	92	84	-8	88	83	-5
total average	67	83	16	79	90	11	70	86	16

s: percentage (very) satisfied

i: percentage (very) important

g: gap between importance and satisfaction

Switzerland compared with neighbouring countries

It is interesting to see if the satisfaction with and the importance of the eleven aspects of the Swiss road network is comparable with neighbouring countries. Table 11.2 displays the satisfaction with and importance of the aspects for Switzerland, compared with Germany, Italy and Spain.

Two thirds of drivers in Switzerland (70 percent) are on average satisfied with the aspects of the network. Fewer drivers are satisfied in the neighbouring countries Germany and Italy. On average 57 percent of the drivers in Germany and 40 percent of the drivers in Italy are satisfied. Almost three-quarters (72 percent) of the drivers in France are satisfied with the French network.

In Switzerland over 70 percent are satisfied with the security of places to stop. Fewer drivers in the neighbouring countries are satisfied with this aspect. In France the cleanliness of service or rest areas is satisfactory (65 percent is satisfied). In Germany half the drivers (53 percent) are satisfied with this aspect. In Switzerland fewer than half the drivers judge the cleanliness to be sufficient.

In Switzerland and the neighbouring countries the various aspects are considered to be more or less equally important (on average between 80 and 90 percent).

Table 11.2 Satisfaction with and importance of the aspects of the Swiss and surrounding networks.

	Switzerland		Germany		France		Italy	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	83	90	61	90	79	91	43	87
understandable and clear direction signs	79	93	68	94	77	95	48	93
understandable and clear traffic signs	80	94	67	93	78	94	51	92
quality of the road surface	70	88	40	91	81	93	38	89
clear and understandable signing at road works	76	91	64	91	77	91	42	89
provision of lighting on major roads	67	73	42	66	61	78	45	82
availability of places to stop, such as service or rest areas	45	86	59	80	73	83	35	84
cleanliness of service or rest areas	47	86	53	85	65	86	19	82
security of places to stop.	73	92	55	88	56	88	30	89
availability of var. message signs along major motorways	58	70	50	68	68	77	47	76
cleanliness of the road	88	83	66	79	82	81	47	83
total average	70	86	57	84	72	87	40	86

s: percentage (very) satisfied

i: percentage (very) important

11.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delay: Had the driver experienced a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Table 11.3 first shows us the proportion of drivers who planned their trip. About 71 percent of the drivers in Switzerland planned their trip. This is comparable with the neighbouring countries, except for Spain. Second, table 11.3 shows us how many drivers used traffic information. About 40 percent of the drivers on the Swiss network used pre-trip traffic information (European average 33 percent). In Italy 43 percent of the drivers used pre-trip traffic information. Drivers on the networks of Switzerland, Germany, Italy, and France frequently stated that the pre-trip information was reliable and useful (between 80 and 90 percent).

Almost half the drivers on the Swiss network use on-trip traffic information. In the surrounding countries about a third of the drivers used on-trip traffic information. Most of the drivers of the countries shown (80 percent or more) judged the on-trip traffic information to be reliable and useful.

Table 11.3 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre trip				on -trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
France	76	35	91	91	29	93	93
Germany	73	32	85	82	35	85	81
Italy	74	43	84	85	39	88	77
Switzerland	71	40	82	84	49	84	84
Europe	72	33	86	87	31	88	85

Delays

In response to the question whether they had experienced delay and if so, what caused it, on average 40 percent of the drivers did report delays (table 11.4). In Switzerland 43 percent of the drivers reported delays. The most commonly reported causes of delays on the Swiss network (based on all respondents) are congestion (58 percent) and road works (53 percent). In Germany most delay was caused by road works (65 percent).

Table 11.4 Percentage of drivers experiencing delay and the cause of the delay.

	delay	congestion	road works	accident(s)	weather conditions	other
France	27	60	29	23	10	11
Germany	47	56	65	22	11	13
Italy	40	72	39	22	4	10
Switzerland	43	58	56	19	5	12
Europe	40	59	53	18	9	9

11.4. Safety

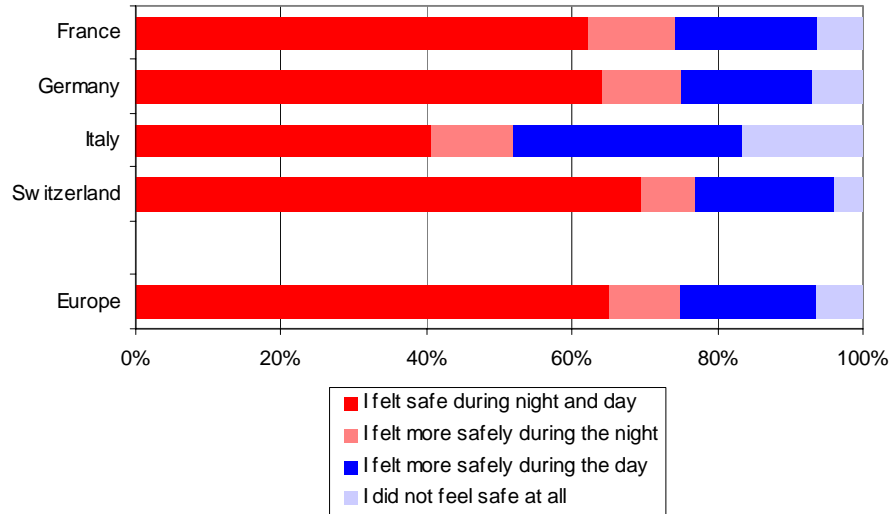
Drivers were asked questions about traffic safety and safety feelings at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

Traffic safety

All drivers were asked to evaluate both countries in terms of feelings of (in-) security, described as involving road rage, aggressive behaviour by others, gesturing etc.

Figure 11.2 shows the feeling of (in-) security for Switzerland and neighbouring countries. Two thirds (70 percent) of the drivers in Switzerland felt secure both during the day and at night. A fifth of the drivers felt more secure during the day. Four percent did not feel safe at all. The percentage of drivers in Switzerland who feel safe is higher than the surrounding countries and the European average. In Italy fewer than half the drivers feel safe during day and night. One in six drivers on the Italian road network does not feel safe at all.

Figure 11.2 Feeling of (in-) security (percentages).



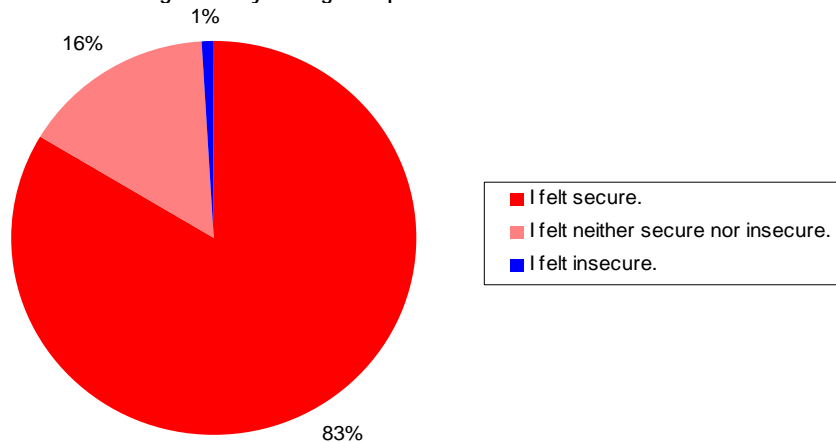
Safety at service or rest areas

Drivers are asked if they had stopped at a service or rest area during their last trip. If they had interrupted their trip they were asked if they felt safe at these service or rest areas. Figure 11.3 shows how many people feel (in-) secure during their stop.

80 Percent of the users of the Swiss network stopped at a service or rest area. In the neighbouring countries, too, more than 80 percent broke their journey at a service or rest area. 83 Percent of the drivers on the Swiss network felt secure during their stop. About 16 percent of the drivers felt neither secure nor insecure. In Italy 52 percent felt secure, in Germany 65 percent felt secure during their stop at a service or rest area; the European average is 68 percent.

The difference between car and lorry drivers in Switzerland is worth noting. Three quarters of the lorry drivers felt safe during their stop at a Swiss service or rest area while more than 90 percent of the car drivers felt safe during their stop.

Figure 11.3 Feeling of safety during a stop at a service or rest area.

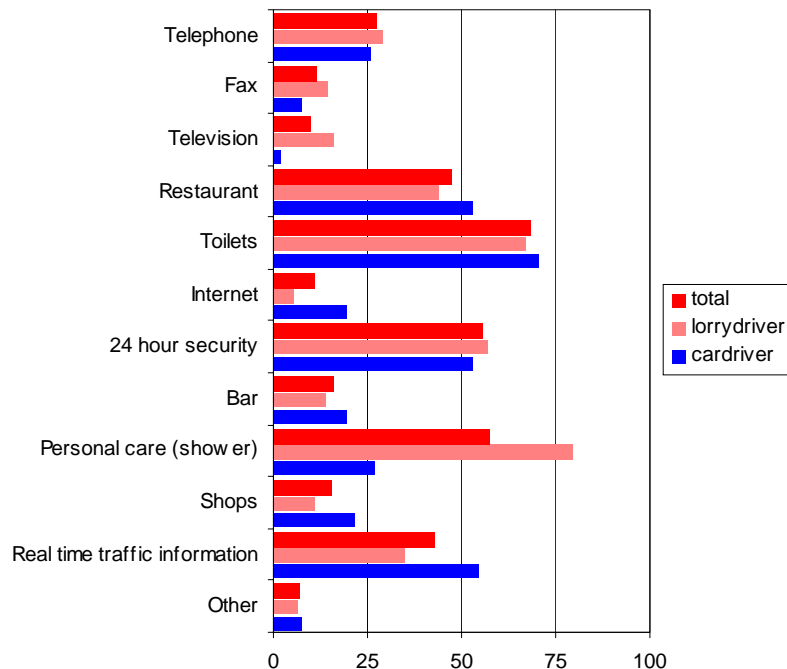


Facilities at rest areas

Besides the question about the safety at rest areas the driver were asked about the facilities they expect at rest areas. Figure 11.4 shows which facilities the drivers expect at the rest areas in Switzerland. The results are split between lorry and car drivers.

Three quarters of the drivers expect a toilet at a rest area. Half the drivers expect a restaurant, 24-hour safety and personal care facilities. Lorry drivers in particular expect personal care facilities at rest areas. Car drivers are more interested than lorry drivers in real time traffic information.

Figure 11.4 Facilities expected at rest areas; lorry and car drivers (percentages).



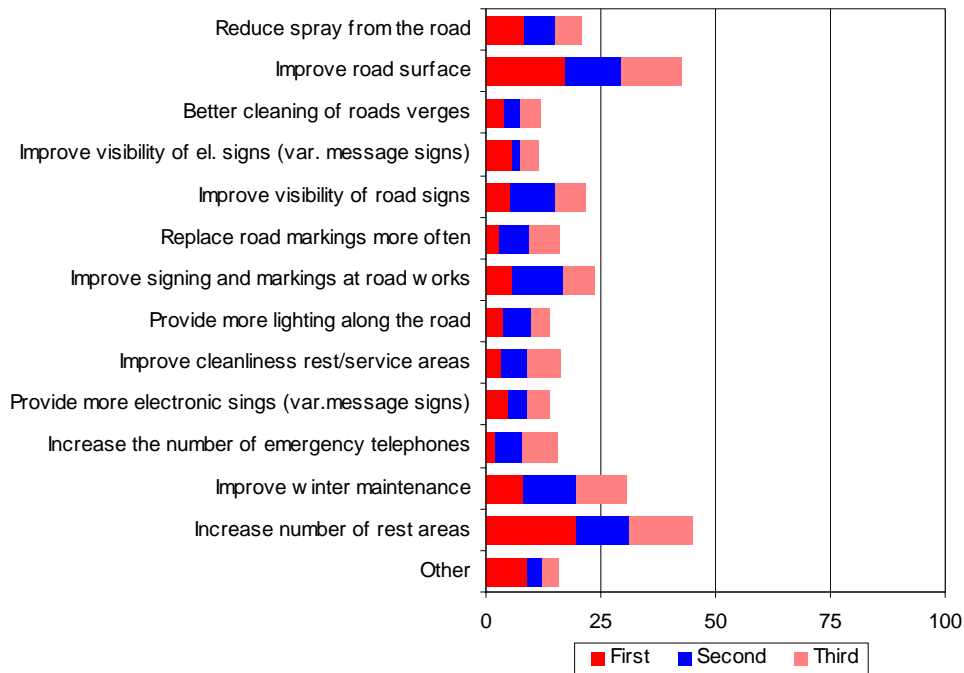
Enhancements to traffic safety and security

Opinions about what the authorities should do to enhance traffic safety and security are presented in figure 11.5. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements.

The quality of the road surface and the number of rest areas are considered to be the two main issues in Switzerland. Increase the number of rest areas is the most mentioned aspect. One in five drivers allocate the highest priority to both of the enhancements. Other enhancements are reducing spray from the road and improving winter maintenance.

'Improve road surface' is the most frequently mentioned enhancement in the surrounding countries.

Figure 11.5 Enhancements to traffic safety and security (percentages).



Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 11.5 shows the results of this statement for Switzerland and neighbouring countries. More than half the drivers in Switzerland disagree with the statement. For about a quarter of the drivers in Switzerland maintenance is more important than the quality of the scenery. In Italy two thirds of the drivers are of the opinion that planting and landscape is also important (they disagree with the statement).

Table 11.5 "It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained." (percentages)

	I agree.	I neither agree nor disagree.	I disagree.
France	33	15	52
Germany	25	20	55
Italy	27	9	65
Switzerland	26	18	56
Europe	29	19	52

12. Non-participating countries

12.1. Introduction

This chapter describes the results for the non-participating countries. The participating countries also conducted fieldwork at the borders of Sweden, Germany, Spain and Italy.

Denmark did fieldwork at the border with Sweden (n=200). Information about the German network was collected by Denmark (n=200), the Netherlands (n=204), Belgium (Walloon) (n=201), Luxembourg (n=160), France (n=199) and Switzerland (n=211). In total 1,175 driver were asked to judge the German network. France collected information about the Spanish road network (n=404). Finally, Switzerland and France interviewed drivers at the border with Italy (n=203 and n=202, respectively). In total 405 drivers were asked to judge the Italian network.

This chapter describes the results in three sections. Section 12.2 deals with satisfaction with road networks. Section 12.3 is about the use of and satisfaction with traffic information. Safety is discussed in section 12.4.

12.2. Satisfaction with and importance of the networks

The study included statements to measure the degree of satisfaction with and importance of several items related to the road network. Satisfaction was evaluated on a 5-point scale from 'extremely dissatisfied' to 'extremely satisfied'. Importance was also evaluated on a 5-point scale; from 'extremely unimportant' to 'extremely important'.

The following eleven elements were evaluated by the drivers:

-
- visibility of markings on the road surface
 - understandable and clear direction signs
 - understandable and clear traffic signs
 - quality of the road surface
 - clear and understandable signing at road works
 - provision of lighting on major roads
 - availability of places to stop, such as service or rest areas
 - cleanliness of service or rest areas
 - security of places to stop.
 - availability of variable message signs along major motorways
 - cleanliness of the road
-

Table 12.1 displays the satisfaction with and importance of the aspects for Sweden, Germany, Italy and Spain. When is reported about the percentage of drivers that are satisfied we mean the percentage of drivers that are satisfied and extremely satisfied together. Same holds for importance. When we report about the percentage of drivers that think an aspect is important we mean the percentage important and extremely important together.

In Sweden, on average, 61 percent of the drivers are satisfied with the network of Sweden. In Switzerland almost 80 percent are satisfied with the understandable and clear direction and traffic signs.

Fewer than half the drivers are satisfied with the cleanliness of service areas, the security of places to stop and the availability of variable message signs along major motorways. Most important aspects are understandable and clear directions and traffic signs.

On average, half the drivers (57 percent) on the German network are satisfied with the various aspects of the German network. The drivers think that understandable and clear direction signs is the most important aspect of the German network (94 percent). This aspect is also most satisfactory (68 percent). The drivers are less satisfied with the quality of the road surface (40 percent) and the provision of lighting on major roads (42 percent).

In Spain half the drivers are satisfied with the Spanish network. All the aspects seem to be very important (minimum of 80 percent). Drivers are most satisfied with the cleanliness of the road (69 percent) and understandable and clear traffic signs (64 percent). A third are satisfied with the availability of places to stop, such as service or rest areas.

Fewer than half the drivers are satisfied with the Italian network (40 percent). One driver in five is satisfied with the cleanliness of service or rest areas. Most important aspects of the Italian network are clear and understandable traffic and direction signs (over 90 percent).

Table 12.1 Satisfaction with and importance of the aspects of the networks.

	Sweden		Germany		Spain		Italy	
	s	i	s	i	s	i	s	i
visibility of markings on the road surface	72	81	61	90	62	97	43	87
understandable and clear direction signs	79	87	68	94	61	97	48	93
understandable and clear traffic signs	79	87	67	93	64	97	51	92
quality of the road surface	58	81	40	91	51	97	38	89
clear and understandable signing at road works	74	84	64	91	62	95	42	89
provision of lighting on major roads	56	50	42	66	60	88	45	82
availability of places to stop, such as service or rest areas	61	66	59	80	35	92	35	84
cleanliness of service or rest areas	46	67	53	85	32	91	19	82
security of places to stop.	42	71	55	88	48	91	30	89
availability of var. message signs along major motorways	43	53	50	68	43	81	47	76
cleanliness of the road	64	57	66	79	69	81	47	83
total average	61	71	57	84	53	92	40	86

s: percentage (very) satisfied

i: percentage (very) important

12.3. Traffic information and delays

The drivers were asked a few questions about the use of pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information. There were also two questions about delay: Had the driver experienced a delay? And if so, what caused it? The results of these questions are discussed in this section.

Traffic information

Half the drivers on the Swedish network planned their trip. A small group of drivers (13 percent) used pre or on trip traffic information. All respondents are of the opinion that the information was reliable and useful.

In Germany three quarters of the drivers planned their trip. A third used pre-trip or on-trip traffic information. Most of the drivers were satisfied with the reliability and usefulness of the information.

Half the drivers on the Spanish road network planned their trip. The use of pre-trip information (39 percent) is higher than the use of on-trip traffic information (11 percent). In both cases the traffic information was found to be reliable and useful.

In Italy three quarters of the drivers planned their trip. Almost half the drivers (43 percent) used pre-trip traffic information. In most cases the information was assessed as reliable and useful. 39 Percent of the users of the Italian road network used on-trip traffic information.

Table 12.2 Use, reliability and usefulness of pre-trip and on-trip traffic information (percentages).

	pre trip				on -trip		
	planned trip	used traffic information	reliable	useful	used traffic information	reliable	useful
Sweden	48	13	100	100	13	100	100
Germany	73	32	85	82	35	85	81
Spain	51	39	92	95	11	95	100
Italy	74	43	84	85	39	88	77
Europe	72	33	86	87	31	88	85

Delays

In response to the question whether they had experienced delay and if so, what caused it, 40 percent of the drivers on the Swedish network did report delays (table 12.3). Most of the delay is caused by congestion. In Germany 47 percent of the drivers reported delays, especially those caused by road works. In Spain 27 percent of the drivers experienced delay, caused by congestion. Two fifths of the drivers on the Italian network also experienced delay caused by congestion.

Table 12.3 Percentage of drivers experiencing delay and the cause of the delay

	delay	congestion	road works	accident(s)	weather conditions	other
Sweden	22	50	41	14	9	9
Germany	47	56	65	22	11	13
Spain	27	56	16	19	2	19
Italy	40	72	39	22	4	10
Europe	40	59	53	18	9	9

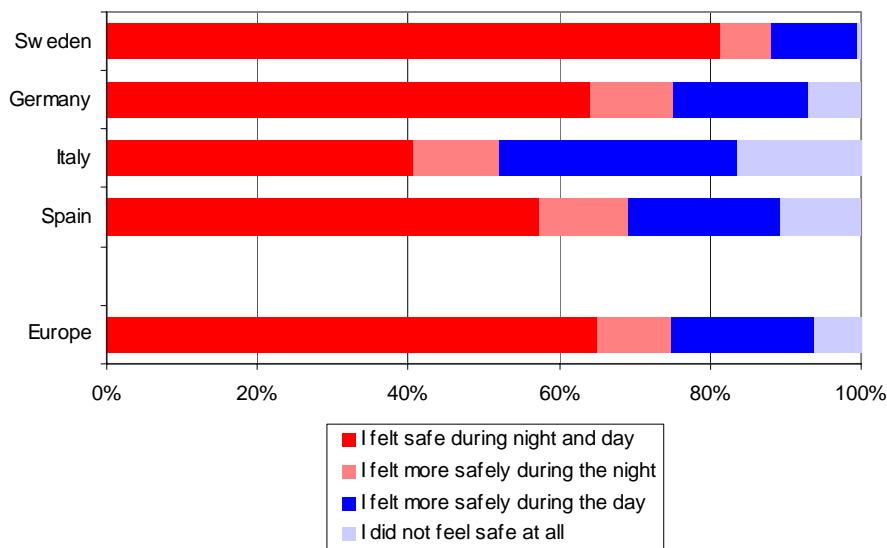
12.4. Safety

Drivers were asked questions about traffic safety and their perception of safety at stop or rest areas. Drivers were also asked what the authorities should do to improve traffic safety.

Traffic safety

All drivers were asked to evaluate both countries in terms of feelings of (in-)security, described as involving road rage, aggressive behaviour by others, gesturing, etc. Figure 12.1 shows the feeling of (in-)security in the non-participating countries. More than 80 percent of the drivers in Sweden felt secure both during the day and at night. In Germany and Spain about 60 percent felt secure both during the day and at night. In Italy fewer than half the drivers felt secure both during the day and at night.

Figure 12.1 Feeling of (in-)security (percentages).



Safety at service or rest areas

Drivers were asked if they had stopped at a service or rest area during their last trip. If they had interrupted their journey they were asked how safe they felt at these service or rest areas. Table 12.4 shows how many people feel (in-)secure during their stop.

73 Percent of the users of the Swedish network stopped at a service or rest area. Most of them (84 percent) felt secure during their stop. In Germany, Italy and Spain around 85 percent visited a rest of service area. In Germany two thirds of the drivers felt secure during their stop. In both Italy and Spain a fifth felt insecure during their stop.

Table 12.4 Feeling of safety during a stop at a service or rest area

	visited a rest or service area	I felt secure.	I felt neither secure nor insecure.	I felt insecure.
Sweden	73	84	16	1
Germany	84	65	30	5
Italy	83	52	25	22
Spain	86	59	20	21
Europe	79	68	25	7

Facilities at rest areas

Besides the question about safety at rest areas the drivers were asked about the facilities they expect at rest areas. Table 12.5 shows which facilities the drivers expect at rest areas in the non-participating countries.

Almost all drivers on the Swedish network expect a toilet at a rest area. Half the drivers expect a telephone, a restaurant and 24-hour security. In Germany the most frequently expected facilities are toilets, a restaurant and 24-hour security. Drivers on the Italian road network expect a toilet (72 percent), 24-hour security (54 percent), real time traffic information (52 percent), a restaurant (51 percent) and a telephone (50 percent). Finally, in Spain three-quarters of the drivers expect a restaurant, toilet, 24-hour security and personal care facilities.

Table 12.5 Facilities expected at rest areas (percentages).

	Sweden	Germany	Italy	Spain
telephone	46	50	33	50
dax	12	16	9	19
television	7	18	6	11
restaurant	58	71	51	77
toilets	94	93	72	89
internet	6	18	7	11
24 hour security	51	61	54	68
bar	2	14	29	33
personal care (shower)	39	58	51	69
shops	41	34	20	24
real time traffic information	35	46	52	55
other	0	6	4	5

Enhancements to traffic safety and security

Opinions about what the authorities should do to enhance traffic safety and security are presented in table 12.6. The respondents could indicate a maximum of three required enhancements. They also could prioritise the required enhancements. This table shows the enhancements that are mentioned most totally.

Table 12.6 Enhancements to traffic safety and security: most mentioned (percentages).

	Sweden	Germany	Italy	Spain
first	improve road surface	improve road surface	improve road surface	increase number of rest areas
second	improve visibility of road signs	increase number of rest areas	increase number of rest areas	improve road surface
third	improve visibility of el. signs	reduce spray from road	improve visibility of road signs	improve cleanliness of rest areas

Quality of the landscape

As a final question the drivers were asked about the importance of the landscape/scenery. They could agree, neither agree nor disagree, or disagree with the following statement:

'It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained.'

Table 12.7 shows the results of this statement for the non-participating countries. A quarter of the drivers on the Swedish network disagree with the statement. Almost half the drivers in Sweden agree with it, i.e., for them road maintenance is more important. In Germany, Italy and Spain more than half the drivers do not agree with the thesis. They are of the opinion that the quality of the scenery is important too.

Table 12.7

"It does not matter what the planting and landscape along the roads looks like, just as long as the roads are well maintained." (percentages)

	I agree.	I neither agree nor disagree.	I disagree.
Sweden	41	30	29
Germany	25	20	55
Italy	27	9	65
Spain	15	8	76
Europe	29	19	52

13. Appendix

The participating countries were given the opportunity to explain their policy and/or national road user survey results related to the results of ERUS.

13.1 Ireland

The results of this road user survey would generally reflect the current status of the national road network, which is still largely of single carriageway standard.

In 1999, the National Roads Authority together with the Department of Transport, embarked upon an ambitious programme of road improvements. These improvements will be substantially complete by 2010, and will result in a new network of motorways and dual carriageway roads. This new network will link all of the major cities on the island of Ireland, including a new motorway along the Dublin-Belfast corridor. Other scheduled road improvements will remove known bottlenecks and sections of poor quality carriageway from the network. In addition, the Authority has been spending large amounts of money to improve the road surfacing of national primary and national secondary road sections.

These road improvements will result in a high quality, safer road network, with good capacity and level of service, good advance direction road signage, and traffic route lighting at all of the major grade separated interchanges.

In conjunction with these major improvements, the Authority has recently commenced work on a number of ITS related projects. Once complete, these projects will provide travel and traffic information through Variable Message Signs on the M50 and M1 motorways, and on the N7 national primary route between the M50 and Naas.

13.2 England

Question: Can comparisons be drawn between the 2004-05 results of the Highways Agency's Road Users' Satisfaction Survey (RUSS) and ERUS?

Answer: Other than that both studies measure the 'most recent journey' on the English road network and assess road users' experiences, it is difficult to draw direct comparisons.

The two studies use different methodologies; cover different topics and where topics are similar, evaluate different aspects. Although the topics cover similar issues, for example, road safety, information provision and delays, there are significant differences in the types of questions asked. ERUS focuses more on the actual road network seeking views on areas such as the visibility of markings on the road surface, provision of lighting on major roads and cleanliness of roads and rest areas. The RUSS also evaluates more general themes such as vulnerable users, attitudes to roadworks and perceptions of safety.

Question: What are the main differences between RUSS and ERUS?

Answer: The main differences between the two studies include:

The methodology for the RUSS involves selecting a random sample of 19 census output areas throughout England and interview eleven people in each one each month. To ensure the interviews are representative, the study weights the number of people interviewed in relation to location, gender, age and employment status. The ERUS in contrast does not ensure that views are representative and is completed in a fixed period (between August and September 2004). This will introduce a seasonal effect compared to RUSS (e.g. a high proportion of holiday trips).

RUSS interviews road users (i.e. including those who travelled as passengers); ERUS only interviewed drivers. In consequence, 51% of respondents in RUSS are female (in order to be representative), while only 12% of respondents interviewed about English roads for ERUS were female.

RUSS measures expectation, importance and satisfaction for each service, while ERUS measures importance and satisfaction. ERUS differentiates between lorry, coach and car drivers. In contrast, RUSS does not make comparisons between professional and private drivers.

ERUS does not cover topics such as driver characteristics (i.e. ownership and the number of cars per household) and provided information on the day, time of journey, and regional location.

ERUS classifies people by their annual mileage on motorways and trunk roads, RUSS by their annual mileage on all roads. People are more likely to be accurate about the latter than the former.

Both studies research different aspects of safety and security. ERUS investigates the security of places to stop, while RUSS explores experiences of bad driving and perception of safety on the road network.

RUSS evaluates the awareness of journey information services that the Highways Agency provides, and seeks views on what types of information drivers would find useful. It also outlines why drivers have contacted the Agency and the method of contact. ERUS in comparison outlines the proportion of drivers that plan and use pre-trip traffic information, on-trip traffic information, and the reliability and usefulness of this information.

13.3 Belgium Wallonia

Satisfaction barometer of the users of the Walloon Region motorways

Context

The measurement of a satisfaction barometer of the users of the Walloon Region motorways is part of the modernization process of the roads administration management tools.

It was established between 2000 and 2001 in collaboration with the University of Liege. Invaluable source of learning, this barometer contributed to define some strategic choices and helped to allocate as well as possible the investments on the motorway network.

Method

In all, more than 3 000 users (Walloon and others) of the Walloon motorway network, selected according to various statistical methods, were questioned:

- 2 000, exclusively Walloon, throughout the 12 months of the **procedure by telephone**;
- twice 500 during **field surveys** at particular times, namely the summer holidays and the winter period, to target in particular the other Belgian users and the foreigners.

The questionnaire submitted to the users included **20 criteria of evaluation** about various aspects of the motorways, gathered in **6 global satisfaction indices**:

- state of the motorways,
- conditions of circulation,
- signs and markings,
- security,
- comfort,
- services on the rest areas.

For the foreign users, it was asked in supplement an appreciation of the situation of the Walloon motorways compared to the motorways in the country of origin.

In parallel, the investigators organized during the procedure some “**dialogue days**” in three cities (Liege, Namur and Mons) with the various categories of users (private users, professional users and truck drivers), taken separately. These groups were made up only of users and not of representatives of users.

The objective aimed at collecting a certain number of qualitative information likely to clarify or complete the data collected by the procedure of the questionnaire survey.

Results

The evaluation based on 6 global satisfaction indices is rather neutral: at the eyes of the users, the Walloon motorway network does not present large gaps but not major assets either.

On the other hand, when one considers the 20 specific criteria subjected to the appreciation of the users, strong points as well as the defects emergent clearly. For illustration, one will point the two most extreme evaluations: the most positive for the lighting and the weakest for the cleanliness of the public toilets.