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Complete report available in Dutch and French:

België in Europees perspectief: Vergelijkende analyse van de prestaties op het gebied van verkeersveiligheid.

La Belgique dans le contexte Européen : Analyse comparée des performances de Sécurité Routière.

This report aims to shed light on Belgium's road safety performance using a comparative analysis of the different European Union Member States. The analysis is intended to be multidimensional and the 'pyramid of road safety indicators' (Koorstra et al., 2002) was the model adopted to structure the information collected. This model is based on the premise according to which a country's 'final performance' in terms of road safety (number of accidents, fatalities, injured) is drawn up on different levels.

The following was considered:

- ▶ The results related to the number of fatalities recorded on our roads ('overall performance'), as well as:
- ▶ Factors considered to be direct determinants of the number of accidents and victims (referred to as 'intermediate performance') related to the behaviour of users, the quality of the fleet of vehicles on the road, infrastructure and the quality of the emergency services that respond to accidents,
- ▶ Road safety programmes and measures,
- ▶ 'Fundamental' factors related to structural characteristics and cultural differences between the different countries (that are likely to indirectly affect or constrain the road safety performances obtained).

The objective of this analysis is to describe Belgium's 'overall' performance in the European landscape, in order to be able to relate it to the 'differences' or characteristics of our country on one or several other levels of analysis, and thus offer interesting avenues of investigation for explaining our country's current position compared with other European Union Member States. The remainder of this synopsis includes the main conclusions related to each level of the analysis.

Overall performance

Based on the total number of fatalities recorded in 2010, Belgium occupies an 'intermediate' position: Belgium's performance is generally poorer than that of its direct neighbours and countries in the North and West of Europe, and better than that of countries in the South and East of Europe. The reported data clearly establishes that the level of risk (number of fatalities per billion of kilometres travelled) is higher in our country than in neighbouring countries. Based on the joint analysis of the number of fatalities, the size of the population, the fleet of vehicles on the road and the number of kilometres travelled, Belgium finds itself in a category of countries that includes Austria, Denmark, Spain, Portugal and Slovenia (Shen, 2012).

The Belgian situation obviously evolved during the decade between 2001 and 2010: the decrease in the absolute number of fatalities that occurred during this period is important: over 56%. The decrease observed in Belgium based on the mortality rate (number of fatalities per ten million inhabitants) corresponds to the European average and is comparable to that recorded in other Western European countries and especially in our immediately neighbouring countries (France and Germany in particular). On the other hand, the decrease in the level of risk (number of fatalities per billion kilometres travelled), is clearly much lower than that observed at the European level. It remains comparable to that observed for other Western European countries (notably France and Germany), but is not sufficient to allow Belgium to make up for its straggling position compared with these countries at the start of the decade. In order for Belgium to occupy a more favourable position in comparison with its immediate neighbours, it is necessary to significantly accelerate the progress – already high in absolute terms – that was observed in the previous decade.

For the different modes of transport

One notes that in 2010, Belgium recorded a mortality rate higher than the European average for most transport modes: car occupants as well as motorised two-wheeled vehicles and cyclists. This is more or less equivalent to the average for heavy goods vehicles. Our country's performance only comes out on top when it comes to pedestrians. It is however difficult to determine, on the basis of these indicators,

whether the level of risk for pedestrians is actually higher in Belgium than in other Member States that have an inferior placing in this category. In fact, the mortality rate calculated does not take into account international differences (that one can assume are important) concerning the popularity of the different modes of transport.

Belgium recorded a comparatively greater decrease than the European average or than that observed in a significant number of other Member States with regard to motorised two-wheeled vehicles and cyclists. Progress has been more modest for other types of users – especially car occupants.

The data collected does not reveal a category of users in which Belgium stands out in an exemplary fashion. Neither is there a category of transport for which Belgium presents a sufficiently distinctive profile that could be isolated as a ‘cause’ for our country’s relatively disappointing overall performance. However the fact that Belgium’s performance is worse for most modes of transport suggests that significant improvements are possible and that efforts to be implemented should be based on overall measures (respecting speed limits, driving under the influence of alcohol), which could benefit all users.

For the different road types

The analysis of fatalities per road type reveals a predominance of fatalities on motorways and rural roads in Belgium. The indications are clear when it comes to motorways: they are comparatively more dangerous in Belgium than elsewhere in Europe even though, as for other indicators, an improvement was observed in the course of the previous decade. Note that these conclusions are based on a comparison of the number of fatalities per 1,000 km of motorways and that they therefore provide a fairly accurate indication of the level of risk that exists on these networks in the different Member States. Nevertheless, it should be noted that this analysis does not take into account the distinctive characteristics of the compared networks. One could ask, for example, if the Belgian motorway network – spanning a significant area for such a small territory – is not subject to greater use than in other countries and if it isn’t characterised by a higher number of entrances and exits that could have an impact on the risk it poses. To answer this question, a more detailed comparative analysis of the characteristics of the infrastructure of the different European motorway networks is however necessary.

According to the age and gender of users

With regard to users’ gender, one notes that there is significant uniformity between the Member States based on the distribution of men and women among the fatalities recorded in 2010: among the victims, the numbers of men is approximately four times greater than that of women victims. The mortality rate associated with each type of category reflects the overall performance.

Four age categories were analysed: 0-14 year olds, 15-17 year olds, 18-24 year olds and those aged 65 years and older, age groups which are known to be characterised by a certain level of risk (considering their lower participation in road traffic). This analysis indicates that, compared with other Member States, Belgium recorded in 2010 a considerably higher proportion of fatalities aged between 18 and 24 years and that the mortality rate for this age category was one of the highest in Europe. Therefore the death of young people aged between 18 and 24 is a top priority throughout Europe, and especially in Belgium. This finding also calls for the strengthening and improvement of overall measures (speed, alcohol), which we know have more of an impact on young people (precisely because of the fact that they are overrepresented among road traffic victims, cf. OECD, 2006).

Intermediate performance

Driving under the influence of alcohol

The series of indicators related to driving under the influence of alcohol reveals a worrying situation in Belgium. Data provided by the ‘DRUID’ project allows us to compare the prevalence of driving under the influence in thirteen Member States and it unequivocally reveals that Belgium is the second Member State, after Italy, with the highest prevalence.

The SARTRE 4 study (2012, a survey conducted in 2010) indicates that the percentage of drivers that voluntarily report that they ‘sometimes’ to ‘often’ drive with a blood alcohol level greater than the legal limit is in Belgium one of the highest (the comparison includes nineteen Member States). This therefore represents a serious challenge for Belgium.

Speed

The most suitable indicator that is currently available comes from the SARTRE 4 study and concerns the intention drivers themselves reported of breaking speed limits in residential zones in the month following their participation in the survey. Belgium is one of six countries (out of the nineteen that participated in the survey) for which this percentage is the highest. The SARTRE studies reveal that Belgium is markedly underperforming when it comes to the speed factor.

Protection systems

With regard to protection systems, the situation in Belgium is rather contrasting. It reflects the European average for the main indicators concerned. Nevertheless progress could still be recorded in comparison with a certain number of countries where, for example, wearing a seatbelt in the front or rear seats is almost systematic. There is therefore scope for improvement for achieving safer behaviour with regard to the use of protection systems.

Fleet of vehicles on the road

The analysis shows that the fleet of vehicles on the road in Belgium is one of the youngest in Europe and is also renewed at a fast pace. This finding provides a higher guarantee of safety, as the latest vehicles are, in principle, the most effective. In terms of road safety. The performance of the Belgian fleet in Euro NCAP tests confirms this observation: Belgium compares favourably in this respect with other countries that present superior overall road safety performance. We therefore bear in mind that Belgium displays a relatively mediocre performance concerning the number of fatalities, notwithstanding its very good performance from the point of view of the quality of its vehicles on the road. Even if improvement in the safety of cars on the road should be continuously encouraged, these observations suggest that improvements exclusively focused on this area will not enable our country to catch up with our neighbours and the highest scoring countries in Europe in the context of the number of deaths.

Medical emergency systems

Besides the fact that it possesses reliable data for measuring the quality of its emergency medical services, Belgium ranks among the best performing countries in terms of medical care, equipment and accessibility to these services. A driver involved in an accident in Belgium can, if we believe the data, be assured of the fastest intervention in Europe and support from a skilled medical team.

Therefore the finding is similar to that which the analysis revealed for the quality of vehicles on the road: Belgium’s overall performance is relatively mediocre (especially if the best performing countries or even its immediate neighbours are taken as a reference for the comparison) despite its impressive performance for this indicator.

Infrastructure

It is important to clarify at once that the indicators that would allow us to isolate the main infrastructure aspects for road safety and compare them between the different Member States are not available. The two indicators discussed here are very indirect, and one should not assume that it allows us to take stock of Belgium’s situation in terms of infrastructure. It is therefore an area of performance for which few conclusions can be drawn.

The two indicators analysed correspond to the density of the motorway network and to the proportion represented by motorways and trunk roads in the network as a whole. They therefore respectively concern accessibility and the importance of the type of road network considered to be the ‘safest’ in the country. Belgium has a high density of motorways and a relatively higher proportion of trunk roads and motorways than many European countries. This makes it a country that is highly characterised by two types of networks: a theoretically safer motorway network (compared with other countries), but nonetheless distinguished by a higher number of fatalities, and an equally large network of trunk roads,

particularly in rural zones. This duality may constitute a factor that explains the high number of victims recorded in certain parts of the country, notably in the provinces of Namur and Luxembourg.

Conclusion: Belgium's profile in terms of intermediate performance

The different indicators strongly suggest that it is in terms of user behaviour (behaviour, attitudes, culture) that Belgium displays the worst profile compared with its neighbours. This is especially true when the countries display the best overall performances or when neighbouring countries are taken as the point of reference for the comparison. However Belgium is one of the best performing countries with regard to the quality of its vehicles on the road or emergency medical services. As far as the infrastructure is concerned, we must remain cautious and recognise first and foremost that the data available is insufficient: additional research would be required in this area.

Road Safety programmes and measures

This section of the report is based on an inventory of the basic legislation in force in the different Member States, related to speed, alcohol, motorised two-wheeled vehicles or the penalty points driving license. It also includes a number of the most important 'good practices', for each of these points, identified by the 'Supreme' project (2007). It is therefore a section that provides an essentially qualitative analysis. The analysis of the applicable legislation indicates that the latter adopted in Belgium generally represents a 'classic' configuration in European terms. As far as speed is concerned, the most typical limit (50 km/h) is applied to urban roads; however Belgium is one of the few States to employ 30 km/h zones. Our country also stands out from other Member States due to the fact that it has not put differentiated legislation in place related to the blood alcohol level for novice drivers (but has done so for professional drivers). Belgium is also one of the last remaining states not to apply the penalty points driving license. It should be noted that the specific way in which the latter is applied and the results attributed to it vary considerably between countries.

Structure and culture

This final section of the report briefly introduces several structural factors (demography, mobility, land-use planning, etc.) that can be assumed to affect national road safety performance, but for which existing research still offers insufficient documentation.

Cultural factors are then discussed in more detail and there is a focus on what users consider to be their compatriots' 'standard' and therefore 'normal' behaviour with regard to driving under the influence of alcohol and speeding. The data included in this section unequivocally reveals once more that driving under the influence poses a major problem in Belgium. Our country reveals the highest percentage of drivers that admit they have 'quite a few' or 'many' friends who drive under the influence of alcohol. On the other hand, with regard to speeding, the situation is less clear-cut: the percentage of drivers that report that other drivers 'often' or 'very often' violate speed limits corresponds (or is slightly lower, in some cases) to the average percentage observed for the nineteen Member States included in the comparison. It is however systematically and significantly higher than that measured in neighbouring countries such as the Netherlands, France or Germany.



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