# **SECBelt**Monitor



### **Editorial**

This is the sixth and last newsletter published under the SEC Belt, a project started by ETSC in 2004 to focus on those European countries which had a higher road risk than the EU-15 average. These countries include all the new EU Member States, but also Italy, France, Belgium, Portugal, Spain and Greece. Together, they form a belt stretching from the Southern to Central and Eastern parts of Europe. ETSC has named them the SEC Belt countries, with SEC standing for Southern, Eastern and Central European countries. While the population of the SEC Belt countries represents 34% of the current European population, the share of road deaths is 54% of the total number of persons killed in the EU.

This issue of SEC Belt Monitor presents the latest developments in road safety in Portugal, Malta, Spain, France, Belgium and Italy.

Following an introduction of the road safety policies of these six countries (Trends and Figures, p.1), Mr. João Lourenço Cardoso from LNEC, the Portuguese National Laboratory of Civil Engineering, gives his view of the specific situation in Portugal, (see Opinion, p.3). ETSC then interviewed Maria Attard from the MTA (Malta Transport Authority), an operational arm of the Ministry of Urban Development and Roads, to get an insight of the most recent developments in Malta (see the Country Focus, p.6).

## Trends and figures

It is now commonly known that France is a success-story having started as a low-performing country and managing to reduce by 35% the number of road deaths between 2001 and 2005. This contributes to support the idea that even less well performing countries can develop a successful strategy to effectively increase the level of road safety in their country. A crucial reason for this success has been the French Government's consistent expression of political will at the highest level of the State to make road safety a priority issue under the new five-year term when it began in 2002. But also, raising compliance with traffic safety law, increasing public awareness for road safety, and improving infrastructure have contributed to this achievement (see PIN flash 2 published by ETSC in September 2006).

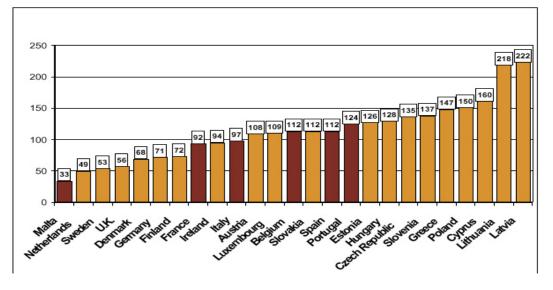
But it is fair to say that other SEC Belt countries, such as the ones this present issue of the SEC Belt Monitor chose to focus on, have been able to equally demonstrate that progress was possible also for the European "laggards".

Road safety became a priority for Belgium from 2001 onwards. Today, the country has 112 deaths per 1,000,000 inhabitants (see figure 1). Since 2001, Belgium has increased speed and alcohol checks with the aim, among others, to bring up speed checks to 40 million vehicle per year by 2010 (8 controls per vehicle per year). As well, the country created the principle of responsibility of stronger versus more vulnerable road users as of 1 January 2004. Sanctions have increased with the new traffic law that came into force in the same year. Italy has shown political support and will to play a high-level leadership role by initiating the Verona process in 2003 under the Italian EU Presidency. It also recently introduced a penalty point system for traffic offences and declared speed a priority area of its road safety policy. Between 2003 and 2004, speeding offences have increased from 50,000 to 74,000 in this country and the deaths caused by speed were reduced. Also drink driving checks and offences both increased, whereas drink driving deaths





Fig. 1: Number of road deaths per million inhabitants in the EU-25 (2004). Source: CARE



have decreased slightly. The impact of seat belt enforcement is however more difficult to assess because of the lack of data available. Still, Italy had 97 deaths per 1,000,000 inhabitants in 2004. It can do better. In Spain it was the first time in May 2006 that a Head of government included road safety as a priority worthy of being in his address to Parliament. Prime Minister Zapatero presented a new commitment to reach 40% reduction in deaths by 2008 (based on 2003 baseline). Also, the country has decided to introduce a new penalty point scheme in July 2006. Spain has undertaken a considerable effort in the last years to reduce the number of road deaths, but has still 112 fatalities per 1.000.000 inhabitants. Portugal's level of road deaths has been dropping consistently in the last years to reach 124 deaths per 1,000,000 inhabitants but is still above the EU average. Significant changes to the 1994 Road

Code, the main road traffic law in force in the country, were introduced in 2005. Among others, there has been an increase in sanctions for drinkdriving, excessive speed and infringements of the use of seatbelts or child restrain systems. As for Malta, figure 1 places the country as the one with the lowest death rates per 1,000,000 population compared to the whole EU (33 road deaths per 1,000,000 population)! This island of the Mediterranean Sea, isolated from transit road traffic, has developed distinctive transport conditions. It also presents the characteristics of being very densely populated. As such, one has to be careful when trying to apply best practices from Malta to other SEC Belt countries. Malta can still make a lot of improvements: for instance, it still has a BAC limit as high as 0.8 and its seat belt wearing rate for adult rear seats is only of 43%.

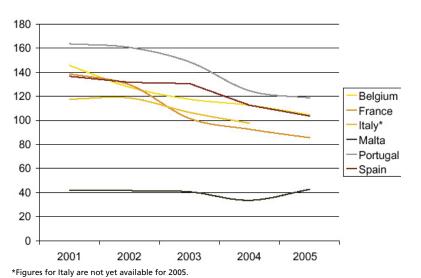


Fig. 2: Comparing deaths per million inhabitants of Belgium, France, Italy, Malta, Portugal and Spain (2001 – 2005).

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### **Opinion**

### Portugal - "Surfing on previous long-term initiatives"

In 2002, Portugal has adopted its first National Road Safety Plan, setting a target of 50% reduction of deaths and serious injuries on national roads, and an even more ambitious target of less than 60% deaths and serious accidents for vulnerable road users by 2010. At the same time, the government developed a set of long-term measures that were to bring lasting benefits.

Four years laters, ETSC has asked João Lourenço Cardoso, Senior Research Officer at the Laboratório Nacional de Engenharia Civil (LNEC) (National Laboratory of Civil Engineering), in Lisbon on his opinion about the Portuguese progress in road safety.

In recent years, road safety developments in Portugal have led to an important reduction in the number of accidents and serious victims. From 1990 to 2005, the number of injury accidents was reduced by 18%, whereby the number of serious injuries was reduced by 69% and the number of deaths by 53%. At the same time, traffic volume more than doubled (see Fig. 3).

In 2002, at the start of the National Road Safety Plan preparation, Portugal had a rate of 160 deaths per million inhabitants, which was 57% higher than the average in the EU15 (46% higher than EU25 average). Decision makers considered these results unacceptable and looked to adopt the EC ambitious target of reducing the number of deaths by 50% between 1998 and 2000 (mean values as reference) and 2010. Portugal adopted a 50% target to reduce both deaths and serious

injuries, and a specific 60% target reduction as concerns pedestrians.

The Plan comprises a set of measures that concern either the strategic level (continuous education of road users; a safe road environment; legal framework and enforcement) or the operational level (short/medium term measures that have to be implemented by 2005, following specific action programs in nine "thematic" areas such as safer drivers' speed or enhanced safety for pedestrians). Both levels are inter-related.

"In 2002, Portugal had 57% more deaths per million inhabitants compared with the EU15 average and 46% compared with the EU25 average."

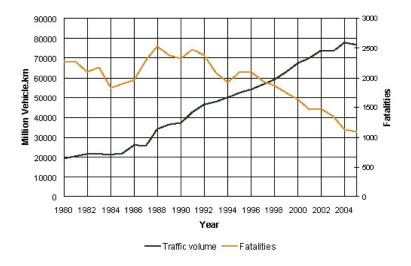


Fig. 3 - Traffic volume and deaths in Portugal (1980 to 2005). Source: LNEC, DGV



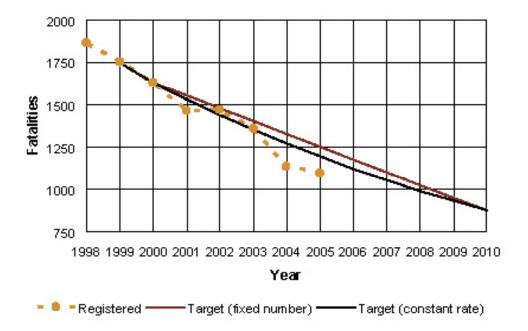


Fig. 4 Deaths. target and registered numbers. Source: LNEC, DGV

Recent safety developments indicate that the country is on the right track to comply with its own targets, as demonstrated in Figure 4, whether considering a reduction in the yearly number of serious victims by a fixed number or by a constant rate.

# Reaping the benefits from the Road Safety Plan

As the national Road Safety Plan started to be applied in 2003, a new impetus on road injury reduction was achieved. Since 1990, the pattern had been one of sustained reduction in the number of deaths and serious injuries for all road user classes (pedestrians, cyclists, mopedists, and occupants of cars and trucks) with the exception of motorcyclists. However, since 1999 the number of deceased motorcyclists had been declining.

The new Highway Code is the most visible result of the 2003 Road Safety Plan. It had also been regularly discussed in the media during the previous year of its adoption in 2004. As a result, there was a general increase in fines for driving under the influence of alcohol and other drugs, speeding and non-use of seat belts. Rules for novice drivers were clarified, as regards both car and

motorcycle drivers. Awareness for the mandatory use of safety devices by children and for the advantages of pedestrian conspicuity was also raised with the new Highway Code. Lastly, the minimum speed on motorways increased to 50 km/h while the maximum speed limits remained the same.

As concerns traffic law enforcement, police activity was reinforced and the effectiveness of penalties was raised by requiring their on-the-spot payment. Furthermore, in 2005 the merits of enforcement were supported at the highest level, namely by the President of the Portuguese Republic in a week dedicated to road safety.

An integrated set of public campaigns was also defined, in order to raise awareness towards the dangers of serious offences (especially speeding and drink driving), the rules concerning pedestrian traffic, the use of child restraints and seat belts in the rear seats and the rules as regards the use of mobile phone while driving. Unfortunately, however, these campaigns were interrupted in 2004.

The Safety Plan also called for a targeted minimum compliance of 90% for front seat belt use, 60% for rear seat belt use and 70% for children.



95% of moped and motorcyclists should wear helmets. A penalty point system was not directly addressed by the new Highway Code, mainly due to the fact that it existed already.

"According to measurements carried out by PRP, front seat wearing rates have remained almost constant in recent years: 87% in 1999, 86% in 2003 and 2006. Rear seat wearing rates have improved very slowly: 11% in 1999, 25% in 2003, and 45% in 2006"

# Two special focuses: speed and infrastructure

Speed measurement campaigns are made every two years in Portugal, since the year 2000, in several types of urban and interurban roads. Recent results show mixed success in the fight against speeding. Not all road types show a consistent decrease in the average speed. However, extreme speeds decreased and became closer to the average speed in all road types. In urban roads, decreases in both the average and the standard deviation of speed distributions were observed from 2000 to 2004. Nevertheless, plans are being made to install automatic speed enforcement in selected interurban road sections; already, such devices are being installed in some high volume urban roads in major cities of the country.

Interventions in road infrastructure certainly provide an important contribution to the decrease in traffic mortality. From 1999 to 2004, the motorway length increased by 50%. In this period, there was a 30% increase on traffic volume in tolled motorways, while the number of injury accidents increased by 19%, only. Improved and regular grant schemes for high risk sites intervention by the National Road Administration is contributing for the decreasing injury frequency in single carriageway roads. Furthermore, low-cost engineering measures are being applied in interurban roads passing through small villages; these include speed actuated devices and

roundabouts. Moreover, traffic calming is being applied in selected urban areas. Road safety audits of design schemes are starting to be implemented, using a technical manual published in 2002. Engineering measures to reduce run-off-road accident frequency and severity are being implemented in major interurban roads. Road contribution to motorcyclists' injuries will greatly diminish in the near future, as very stringent standards require all new safety barriers to be motorcyclist friendly, regardless of their position. Existing barriers shall be upgraded.

"Societal changes and safety educationhas enabled to change favourably attitudes of road users and professional practices."

#### Better attitudes of road users...

Recent improvements in road safety in Portugal are in line with developments started more than a decade ago, and their foundation rests on efforts started previously. Societal changes, resulting from economical development played an important role. For instance, the number of moped rider deaths dropped by 42% over the last four years (and by 85% since 1990) simply because more and more people have been able to leave the moped and buy a car. Safety education – as carried out by public institutions and private associations such as Prevenção Rodoviária Portuguesa (PRP) – has been of paramount importance in raising awareness for all key players (drivers, enforcement agencies and road administrations), which resulted in changes in attitudes, as detected in the SARTRE studies. Ultimately these new attitudes seem to have contributed to changes in users' behaviour and others stakeholders' professional practices.

#### ....but some reefs lay ahead

Recent years have witnessed the rise in bicycle use, especially in urban areas. Yet, the allocation



of space for these new users by local administrations has been slow, which may result in undesirable future developments. Furthermore, adequate planning and construction is made more difficult by lack of technical recommendations.

Political support for the implementation of the national Road Safety Plan has been reduced, affecting the supervision and coordination of the activity of the country's leading institutions in road safety. This has disturbed significantly the Plan's effectiveness.

Also, due to economic difficulties, the steep rise in traffic volumes has slowed down recently so road safety efforts are no longer set off by an increase in driving. Thus, shortcomings in current policies are more difficult to identify and there is the danger that their effects will last longer than desirable.

"Political support has been recently reduced (...). Shortcomings are more difficult to identify and there is the danger that their effects will last longer than necessary."

João Lourenço Cardoso is Senior Research Officer at the Laboratório Nacional de Engenharia Civil (LNEC) (National Laboratory of Civil Engineering), in Lisbon, Portugal, where he heads the Planning, Traffic and Safety Division of the Department of Transportation. He has participated in more than 50 research projects and studies



in Portugal and abroad, namely in the initial development of the Portuguese road accident database, the development of a system for classification and signing of dangerous curves in interurban roads

and in the preparation of the Portuguese road safety audit manual. He is also involved in road accident reconstruction activities and is invited teacher in several Portuguese Universities post-graduated courses. He participated in the preparation of the Portuguese road safety plan.

## Country focus: Malta

### Vigilant overall!

Malta's road safety level has reached satisfying progress in the last years with a highest reduction of 18% of injury accidents between 2003 and 2004. Still, as the following year's result only was a 1% drop, the question is raised whether the country's relative success will continue. Also, recent statistics have shown that the seat belt wearing rate dropped due to a lack of enforcement and public awareness. The politicians of Malta need to remain vigilant and continue placing road safety high on the political agenda. Otherwise the country's past success might be jeopardised, and the country will not reach its target to halve the number of injury accidents by 2014 as it is the ambition of the national plan.

ETSC has asked Maria Attard from the Malta Transport Authority to explain the most recent developments in road safety in Malta.

# ETSC: How well is Malta performing in road safety compared to other EU Member States?

In terms of road deaths, Malta ranks best of all EU countries with the lowest number of people killed per population. This good performance is mainly to be attributed to the specific morphology of Malta's road transport network: the coun-

try has no motorways, and the bendy nature of most of its roads does not allow for high speeds. However as the absolute figure of deaths is rather small, this indicator does not give a clear indication of Malta's road safety level. A slight fluctuation in the number of road deaths can show an exaggeratedly important change in performance. For instance, in 2004, the country had no



"Malta's preferred way of measuring its road safety performance is to look at the number of injuries not the number of road deaths"

more than 13 road deaths, whereas in 2005 the total figure of road deaths was brought to 17 as one accident involved 5 deaths (showing an increase of 30%).

A preferred way of measuring Malta's performance is to look at the number of injuries. Over the period 2003-2004, Malta has managed to reduce its injury accident figure to 870. This is a reduction of almost 18%. However, the reduction that followed between 2004 and 2005 was less significant (only 1% less). Further effort should go into the reduction of injury accidents if Malta is to achieve its targets.

# ETSC: What are the targets set by the national road safety programme?

Below are the targets for the period 2004-2014:

Year	Targeted reduction in injury ac- cidents	Targeted % decrease	Actual injury accidents reported
2004	870		870
2005	826	5	861
2006	783	10	
2007	739	15	
2008	696	20	
2009	652	25	
2010	609	30	
2011	565	35	
2012	522	40	
2013	478	45	
2014	435	50	

Table 1 Malta's target up to 2014.

ETSC: What are the steps foreseen to reach the target of 50% less road injuries by the year 2014 compared with the 2004 figure?

The Malta Transport Authority has initiated a number of measures aimed towards reducing accidents and increasing road safety. Over the years (i) users have been targeted in specific awareness campaigns such as young drivers and children; (ii) particular accidents have been identified, such as accidents occurring during the night in particular geographic areas; (iii) new legislation has been put in place to regulate behaviour; lastly (iv) infrastructure has been improved to accommodate safer driving and protect the Vulnerable Road Users such as the provision of pedestrian walkways on the newly reconstructed roads and the introduction of cycle lanes.

#### ETSC: How are road accidents data collected?

Data collection related to road accidents is currently divided between three entities, depending on the severity of the accident: 1) Self-reporting is carried out for bumper-to-bumper accidents; 2) Non-injury accidents (excluding bumper-to-bumper) are reported by the Local Wardens (since 2003); 3) Injury accidents are reported by the Police.

In 2005, the Malta Transport Authority approached the police to collaborate on introducing a new additional data record sheet to the traditional one used by the police for injury accidents reporting which is more aligned with the variables used by the European CARE database. This new system allows a more complete analysis of road accident causes. The Police have also started to update their own reporting system, combining the recording into one single new record sheet, and therefore making the analysis of road accident much more convenient.

"The new system to collect data allows a more complete and convenient analysis of road accident causes."



In addition to this database, the Malta Transport Authority has also started to build a road accident geographic information system whereby all accident locations are inputted geographically and the data is made available on maps. These maps will provide policy-makers and the Police a focus for their mitigation measures and enforcement.

ETSC: Has there been a clear improvement of the seat belt wearing rates since new legislation was introduced in 2004?

Unfortunately the first figures for 2006 look disappointing. Despite the introduction of the new legislation, statistics show a decline in seat belt wearing rates for all car occupants between 2004 and 2006.

Year	Driver	Front seat passenger	Rear seat adults
2004	99%	93% (adult) 90% (child)	43% (adult) 24% (child)
2006	97%	95% (adult) 83% (child)	26% (adult) 15% (child)

Table 2 First month figures for 2006

The lack of enforcement of traffic law and insufficient public awareness mainly explain this. When the survey results were published earlier this year, the Malta Transport Authority immediately looked to reverse that trend and started with a seat belt awareness campaign which included public talks, television/radio adverts and printed media.

"Two reasons mainly explain this drop: not enough enforcement of traffic law and insufficient public awareness on the effects of not wearing a seatbelt."

ETSC: Has the number of speed cameras increased in the last years? How do people generally react to them?

So far there are six sites along the network with fixed speed cameras, while the Police conduct random speed enforcement with a mobile cam-

era. These cover 2.3% of the total road network. The first public impression of speed cameras was negative as they were seen as another measure to collect taxes. However, following two fatal accidents in two different sites involving young people and children, the public started to realise the need for controlling speed. Also, part of the fines collected is used for speeding campaigns. Applications from Local Councils for the erection of fixed speed cameras along particular stretches of road have recently increased. But infringement is still very high with 24,738 fines being issued in 2005 from fixed speed cameras.

ETSC: What are the most successful and original initiatives / examples of best practices undertaken by Malta in the last year?

There are two main measures which have been successful in reducing road accidents and related injuries.

1) The first is a **local traffic management scheme** in a mixed land use area mostly used by pedestrians for night time activities (bars, restaurants and entertainment venues). The area road infrastructure was upgraded to include a number of traffic management measures, such as closure of roads (timed pedestrianisation between the hours of 1900 – 0600), one-way traffic and redirection of coaches and large vehicles away from the centre. The measure allowed a decrease of accidents at night from 59% in 2003 to 56% in 2005. As for pedestrian injuries, the figures went down from 24% in 2003 to 22% in 2005.

2) The second measure was the **re-structuring of the driver testing procedure** especially to prevent accidents involving new and inexperienced drivers. The driving test was upgraded to a stricter level. In addition, a penalty point system was introduced for new drivers. There are undergoing discussions to extend the penalty point system to all drivers. Previous to the introduction of this measure the pass rate for obtaining a driving licence was 93%. As soon as the measure was introduced, this dropped down to an average of 45%.

"The passing rate dropped from 93% to 45% as stricter driving tests were introduced."



# ETSC: How important is the safety of infrastructure compared with other road safety measures?

Improving the main road infrastructure, including from a safety point of view, has been the top priority for this Government. The Central Government is in charge of the main arterial and distributor road network, parts of which also fall under the Trans European Transport Networks (16 km of the TENs are in Malta). The Government intends to revise the legislation soon to include the most up-to-date construction practices in the safety guidelines for road construction.

# ETSC: Would you say that the responsibilities for traffic safety are well defined in Malta?

The Malta Transport Authority is the operational arm of the Ministry of Urban Development and Roads. Its responsibilities include the planning and promotion of a safe transport system by road. It coordinates with the different road safety stakeholders including the Police and NGOs. The current inter-directorate committee within the same Authority provides valid input into the needs for road safety. However, there is still the need for a stronger arm in the research into road safety, in order to ensure the effective use of limited funds available.

Dr. Maria Attard is a Manager at the Transport Strategy Directorate of the Malta Transport Authority. She is also a lecturer in Geography at the University of Malta, specialising in transport and urban geography. Her role at the Malta Transport Authority is mainly to develop the transport policy. This included the writing up of the first White Paper on land transport and the drafting of the first road safety strategy for Malta. She is a member of the Authority's road safety committee and the national expert for CARE. Dr. Attard has participated in a number of projects related to road safety and collaborated with a number of agencies, including the ETSC with regards to various road safety initiatives.





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