# SECBeltMonitor



## Editorial

This is the third newsletter to be published under the **"SEC Belt"**, a project started by ETSC in 2004 with the intention to focus on the European countries which have 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 South to Central and Eastern parts of Europe.

This current issue looks into the situation of **Vulnerable Road Users** in the Mediterranean Countries (**Portugal, France, Italy, Greece and Spain**). These countries suffer from accident rates above the EU average, also as concerns rates of traffic injuries and fatalities involving Vulnerable Road Users. Reasons for this include the difficulty in collecting precise accident data for this specific group of road users which, in return, makes it difficult to identify the best measures needed to protect them. Other reasons include that these countries, which can be characterised as having a similar "Southern culture", also have a culture of road safety that sometimes leads them to neglect measures that could save lives: for instance decision-takers tend to repeat the same old mistakes, or the warm weather conditions remove the incentive for motorcyclists to wear helmets. However it is important to realise that the level of risk to which Vulnerable Road Users are exposed in these countries is far from being homogenous. Greece and Portugal have a higher rate of Powered Two Wheelers involved in traffic fatalities than the other countries for instance. Yet Vulnerable Road Users in these countries, with the exception of France, are all together more exposed than the European average. There is therefore no doubt that there is still a lot of effort to be made to change these trends.

Following an introduction of the road safety policies of the Southern SEC Belt countries (Trends and Figures, p. 2 ), Jesús Monclús who is Head of Crash Research and Vehicle Safety at the Fundación Instituto Tecnológico para la Seguridad del Automóvil (FITSA) since 2003, gives his view of the situation in Southern Countries as concerns Vulnerable Road Users' performance and proposes ways to modify the situation in order to improve the level of road safety in these countries. (Opinion, p. 3). ETSC also interviewed Maurizio Tira, Professor of town and regional planning at the University of Brescia on the specific case of Italian Vulnerable Road Users' level of safety (Country focus, p.6). Lastly, you will find a SEC belt brief presented by Antonio Avenoso, ETSC's Research Director and coordinator of the SEC Belt project (SEC Belt brief, p.9).

More information on Vulnerable Road Users can be found in a recently completed publication by ETSC: "Strengthening the safety of Vulnerable Road Users". More than 60 recommendations have been made on how to effectively improve the safety of pedestrians, cylists and users of motorised two wheelers. (http://www.etsc.be/documents/Safety_Vulnerable_Road_Users.pdf)

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# Trends and figures

Vulnerable Road Users (pedestrians, cyclists and users of powered two-wheelers) are particularly at risk in today's traffic system. The highest death rate by far in road transport is under two-wheeled motor vehicle users. Motorcycle or moped travel death risk per kilometre travelled is 20 times higher than for car travel. The risk of being killed in traffic per kilometre travelled is more than 9 times higher for pedestrians than for car occupants and more than 7 times higher for cyclists than for car occupants (ETSC, 2003). The severity of injuries suffered by Vulnerable Road Users is also higher than for car occupants. In 2002 more than 8,000 Vulnerable Road Users were killed in the Southern SEC Belt countries.

There are, however, notable differences between countries (for example, the proportion of fatalities who are cyclists is lowest in Greece and Spain), probably partly explained by differences in amounts and patterns of walking and cycling. These, in turn, reflect economic, social, infrastructural, topographical and climatic conditions.

| | Pedestrians | Cyclists | PTW | Total |
|---|---|---|---|---|
| France | 866 | 223 | 1,450 | 2,539 |
| Greece | 279 | 396 | 14 | 689 |
| Italy | 1,188 | 364 | 1,191 | 2,743 |
| Spain | 776 | 96 | 784 | 1,656 |
| Portugal | 339 | 57 | 359 | 755 |
| Total | 3,448 | 136 | 3,798 | 8,382 |

Table 1. Vulnerable Road Users killed in a road accident in the Southern SEC Belt countries (CARE, 2002)

It also needs to be emphasised that the most important information sources for quantitative statistical crash analyses is data collected by the police or similar agencies at national level. The weaknesses of this source of information for pedestrian and cyclist casualties are well established. First of all, there are problems in terms of *comprehensiveness*. The data is most often based on a limited number of variables describing crash characteristics, and they provide very little information on the injury consequences of crashes such as severity and types of injury, and resulting disabilities. The range of possible factors that can be detected and described on this basis is limited. Furthermore, the *quality* of statistical crash data in terms of completeness and accuracy is not always satisfactory. Finally, pedestrian and cyclist crashes are heavily and disproportionately *underreported* in the police crash statistics compared to what hospital records and other studies show. A particularly important problem is the substantial proportion of cyclist crashes that do not involve any other vehicle. Even in the case of the more severe injuries, the police very seldom record these crashes; they are therefore not adequately represented in the statistics.

The linkage between police data and hospital data would be one of the most effective ways of reducing the level of police underreporting and would also enable the monitoring of other types of injuries that are not normally included in the traffic accident statistics, like the pedestrian "solo" accidents.


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# Opinion

## "How can Mediterranean countries improve the safety of Vulnerable Road Users?"

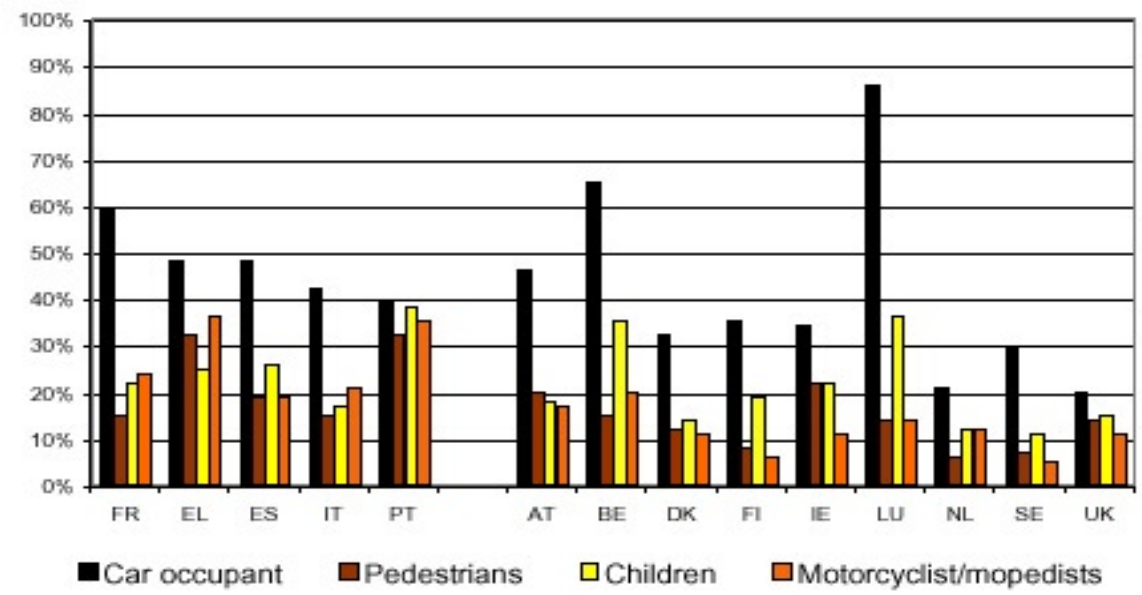
**On the basis of the figures and trends presented in the previous section ETSC has asked for Jesús Monclús' opinion on the current stage of advancement of road safety policy and protection of Vulnerable Road Users in the Southern Countries. Jesús Monclús is a safety expert at the Fundación Instituto Tecnológico para la Seguridad des Automóvil (FITSA).**

**Figures of involvement of Vulnerable Road Users show that Mediterranean countries often perform worse than the average in the EU-15. What are the reasons why road safety decision-makers are slow to adopt effective measures to improve the safety of vulnerable groups in Southern Countries? What is the current level of mobilisation of VRUs to press for a safer road policy? Lastly how does the "cultural" element impact on Mediterranean VRUs' road safety?**

Pedestrians, cyclists and motorcyclists form a road user group, the so-called Vulnerable Road Users (VRUs), whose transport mode is more dangerous than for other road users. In Europe almost 18,000 Vulnerable Road Users were killed in road crashes in the EU, making up 36% of all road deaths (IRTAD, 2004, "International road traffic and accident database", Federal Highway Research Institute - BAST) .The risk of being killed in traffic is highest for motorised two wheelers (about 20 times higher than travelling by car). Pedestrians and cyclists also run a risk that is at least 7 times higher than the risk faced by car occupants. In addition the severity of injuries suffered by VRUs is also higher than for car occupants.

A different classification of VRUs looks at the casualty risks among the different age groups: in this respect the main VRUs groups are most of all children and elderly road users.

**Fatality population rate by type of road users** (SafetyNet data, 2002 or last year available)





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**"The solution to the improvement of VRUs' protection must be approached differently from one country to another."**

The situation of the SEC Belt Mediterranean countries (Greece, France, Italy, Portugal and Spain) with regards to VRUs' involvement in traffic fatalities is far from being homogeneous (see table above). While Greece and Portugal show a particularly high rate of motorcyclists and moped involvement in traffic fatalities (36% and 35% respectively), the percentage of pedestrians involved in accidents in Spain is the same as the percentage of Powered Two Wheelers, PTW (about 19%).

As for the second categorisation, Italy is showing the highest accident involvement of elderly road users (and more often as pedestrians than as car passengers). Yet Spain still shows that 70% of child fatalities in 2003 were passengers of motor vehicles, most of them cars, and not cyclists or pedestrians walking to or from school. Regardless of these variations and with the exception of France, VRUs in the five countries are all together exposed to higher risks than the European average.

Two main lessons can be drawn from these figures. First, as figures vary significantly between the countries, the solution to the improvement of VRUs' protection must be approached differently from one country to another, and even locally. Secondly, a disaggregated analysis of the different age groups' casualties enables to establish in which case they are actually part of the Vulnerable Road User groups identified earlier: the pedestrian, cyclists and PTW.

**"Road Safety decision-makers are slow in taking effective measures to stop yesterday's mistakes."**

One of the underlying causes as to why Southern countries are still performing badly in protecting VRUs is the lack of effective measures taken by road safety deciders to stop repeating yesterday's mistakes. For instance, limited importance was given to VRUs' needs during the transport planning and infrastructural design process in the 60s and 70s, when the basic public space distribution in Southern cities was laid out. But these mistakes are often repeated nowadays. In Madrid, for instance, new residential areas are still being constructed without being connected to the metro network. Provisions and facilities for cyclists are rare in most of the southern cities. The lack of safe cycle facilities has a strong dissuasive effect on most of the population from using bicycles.

**"Vulnerable Road Users' representatives should be consulted in all land-use and transport planning processes."**

The level of vulnerability of road users does not even fully appear in statistics as many of them (for instance, elderly people) simply prefer to avoid strolling around their neighbourhood because they find it too stressful and risky for their safety. A certain lack of public pressure, often due to a lack of awareness on the existence of effective measures, explains why the behaviour of road designers changes very slowly. Cyclists and pedestrian associations are just starting to raise their voice in some countries and this will surely contribute to local and national transport planners adopting more VRUs friendly road patterns. Among the requests of these citizens (and voters) groups is that Vulnerable Road Users' representatives should be consulted in all land-use and transport planning processes.

**"A poor safety culture and other environment factors explain the poor situation for VRUs in Southern Countries."**

A "poor" safety culture and other environment factors helps explaining why the current situation for VRUs in Southern SEC Belt countries is still so


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unsatisfactory. The benign climate encourages the use of Powered Two Wheelers, while the lower than EU-average family income encourages users to purchase vehicles that are cheaper and often less safe. Southern countries are frequently late in signing up to European commitments for a better safety of VRUs. For instance, with the exception of France, all Mediterranean countries were among the last ones to sign ECE regulation on child safety seats. Also in Spain, and with the clear exception of Barcelona (a city that should be considered a "best practice" example), police enforcement for the use of helmets on PTW has been slow to be taken up seriously.

## "Southern Countries can learn from other European Countries' best practices."

Further measures should be introduced in Mediterranean countries following other European countries' known best practices. Road safety decision-makers could for instance encourage wide-spread road safety campaigns in primary education, teaching children the concept of a "safe walk to school" to encourage them to walk safely to and from school. Other measures should make road users more aware of VRUs: for instance the provisional or graduated licensing system for young drivers, a tighter penalty points system for novice drivers or even the promotion of vehicles that are safer for VRUs. Moreover road designers should take fully into account the road hierarchy, distinguishing the different road uses and adopting the "safe" speed limits. Similar to the Dutch "Sustainable Safety" approach, Mediterranean countries could start promoting more widely the 30km/h (or even lower) zones and ensure enforcement of already existing slow traffic zones. A study conducted in 2002 by the Royal Automobile Club of Spain showed that not even the school buses in some areas of Madrid obeyed the 30km/h speed limit signposted in school zones!

Further action could be to conduct a detailed benchmarking of the SEC Belt Mediterranean countries, in connection to the application of existing research such as the EC-funded PROMISING project, looking specifically into a list of measures that can improve the safety of Vulnerable Road Users in those countries. The hunger for more understanding of road safety must never be forgotten as each country and region has something to learn and something to teach. Another landmark study and useful source of ideas for action include ETSC's recent report on the "Safety of Vulnerable Road Users in Southern, Eastern and Central European Countries (The "SEC Belt"). It might be time to turn these reports into action also in Southern countries!



Jesús Monclús is Head of Crash Research and Vehicle Safety at the Fundación Instituto Tecnológico para la Seguridad del Automóvil (FITSA) since 2003. He has been working in transport safety research for many years, specialising in crash data collection and investigation, and safety of child passengers. Jesús Monclús is also Chair of the new ETSC' working party on "Socio-cultural and politico-economical dimensions of transport injuries in Europe".
FITSA is a joint private-public initiative between the automobile sector in Spain and the Ministry of Industry, Tourism and Commerce, the Ministry of the Interior and the Ministry of Education and Science.


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# Country focus: Italy

## "Vulnerable Road Users on the Italian road safety agenda"

**Italy was involved in the two Verona EU Council meetings on Road Safety. Europe is now speaking about launching a Verona process that would ensure a strong policy leadership. Italy is keen on continuing to host and play a key role in the Verona meetings. How advanced is Italy in its road safety agenda, and how seriously is the issue of Vulnerable Road Users perceived both by the public and by road safety decision takers?**

**In addition to a target to decrease fatalities by 40% Italy adopted a penalty points system two years ago. This has been the most important road safety measure adopted by this country in the last 20 years. However, as the penalty points system shows, the country needs to find additional measures such as increasing the level of police enforcement to protect its road users. Moreover Italy will need to raise awareness of motorised drivers of the risks to which Vulnerable Road Users (VRUs) are exposed.**

**ETSC has spoken to Prof. Maurizio Tira, specialist in mobility and planning at the University of Brescia, on the actual barriers to the protection of VRUs and on what Italy needs to do if it is to play a leader role in Europe for road safety.**

**"Italy has to include discussions of a vision zero, targets and VRUs if it wants to play a leading role in the Verona process."**

ETSC: Where does Italy stand in the development of its Road Safety Action Plan and the protection of Vulnerable Road Users (VRUs)?

The Government adopted a National Plan for road safety in 2000 and set the objective to reduce the number of fatalities by 40% between 1998 and 2010. Measures were included addressing the particular needs of VRUs concern pedestrian zones, 30 km/h zones, cycle networks and cycle facilities.

Despite the national target there is so far no comprehensive policy to implement Italy's National Plan for road safety at the local level. In my opinion there should be a clearer commitment from local authorities to create road safety institutions and to engage cooperation among all stakeholders. This requires a good coordination among the different levels of competences. The local level also often lacks the experience to apply for bids to finance road safety projects. Another weakness is the reluctance of the administration to use concrete figures, to look for evidence and to monitor the effects of implementing such measures. Technical guidelines for safety measures are also very recent and still not fully satisfactory. Lastly society lacks awareness that casualties are not a fatality, and therefore the situation is only slowly changing.


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ETSC: Why are VRUs not a priority on Verona's agenda?

Italian Transport Minister Pietro Lunardi seems to put more emphasis on transport infrastructure, maybe because of his own personal background as an engineer, and also because the development of safe transport infrastructure would enable further economic development of Italian regions where infrastructure is much needed. Nevertheless if Italy is keen, as it showed at the last Verona meeting, to take a leadership role in the European road safety debate, it should make sure it is linked to a deeper discussion, including the Vision zero, the means to reach the targets, and the needs of VRUs.

**"There is a lack of systematic implementation of the road safety agenda at a local level."**

ETSC: How are local entities involved in road safety?

Now that most of the non-urban network belongs to provinces (and no longer to the National agency for highways and motorways) they find it easier to launch road safety initiatives. Best practices in urban safety exist in several regions, even in small villages, and in some major cities such as Brescia or Florence (SUVs have been totally banned from the city centre of Florence). Rome, as some other towns, is working on sustainable mobility. Although these projects concern more often environment, road safety is linked and improves as a result. However there is a lack of systematic implementation of the road safety agenda at local level.

ETSC: Does Italian policy look for ways to make motorised users more aware of VRUs and more responsible of the risk they create for them?

The technical guidelines for the drawing up of urban traffic plans clearly state walking as the first and most relevant mode in urban areas (Directive of the Ministry of public works no. 77/1995). Within the main goals of the legislation for cycle facilities (Act of the Ministry of public works 30-11-1999, no. 557), safety is explicitly mentioned too. Also Italian urban areas have been originally designed for pedestrians, which make altogether enough reasons for taking the safety of VRU as a priority issue. Unfortunatley it often occurs that most of the campaigns for increasing road safety (i.e. drinking and driving, use of drugs, speed effects, etc.) aim at reducing the risk for car users, rather that pointing out the risk vehicles cause to non-motorised users.

**"Wearing a helmet when driving a moped is too often considered to be out of fashion."**

ETSC: Helmets are mandatory for all motorised two wheelers in Italy like in all Southern countries. However the large population of moped users seems still very reluctant to use helmets. Why?

Wearing a helmet when driving a moped is too often considered to be "out of fashion" among teenagers. Social pressure is low, even from older generations, who drove mopeds themselves when helmets were not yet mandatory, and often underestimate the increased traffic in the last years. There is also a lack of enforcement by the police who concentrate more on other illegal behaviour (such as illegal parking) than on the use of helmet by motorcyclists.

ETSC: Weaknesses of data collection particularly for the case of pedestrians and cyclists are well established. What does Italy do to remedy under-reporting and lack of comprehensive and quality data for VRUs?


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This is a very weak point, although the reporting rates vary with the severity of accidents. For fatalities we can estimate a better accuracy (5 to 10% of underreporting only) than for seriously injured pedestrians (where underreporting is estimated to be 50%). For seriously injured cyclists the percentage is suspected to be even higher. Light injuries tend to be underreported by 65% for pedestrians and by 80% for cyclists.
Brescia is an exception to underreporting. Its ten-year old database on accidents related to VRUs also gives an indication of where the accidents have taken place. The quality of data is controlled and the underreporting corrected by checking the sanitary emergency service files and even the news in the local press.

**"Police enforcement is needed to strengthen the penalty points system."**

ETSC: How successful is the penalty points system introduced 2 years ago?

The penalty points system has been a crucial measure in Italy although more recent data show a decrease in the good results obtained immediately after the introduction of the system. This reminds us how important it is to continue effort and to increase the level of police enforcement. The penalty points system can remove up to five points, for instance, when cars don't give the priority to VRUs on zebra crossings. In reality, however, there is no wide application of such a strict rule.

ETSC: Systematic safety audits and safety impact assessment procedures are a demonstrably effective and cost-beneficial tool to improve road safety. Does Italy currently work to see how such assessments can be made more effective and particularly give high consideration to the needs of VRUs in the course of the process?

Italy has so far only issued recommendations on road safety audits and road safety impact assessments and as a result they are not applied systematically. Yet in the last years higher education has been developing a master course on road safety to face the lack of expertise in that field. The experience is too short to know whether this education will increase the safety of VRUs.

ETSC: We wish you lots of success and thank you very much for this conversation, Prof. Tira.

Prof. Maurizio Tira is Professor of town and regional planning at the University of Brescia, Faculty of Engineering, since 2002. He is specialised in mobility and planning, especially for Vulnerable Road Users, and in urban management and road safety. His main research fields are "accessibility and safety in urban environment", "urban and traffic planning" and "planning in hazardous areas". Prof. Maurizio Tira is also Chair of ETSC's working party on "Evaluation of road safety policies" within the SEC Belt project.




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# SEC Belt brief

## Policy Papers

As reported in the previous issues of SEC Belt Monitor, ETSC has organised, in the course of May 2004, three different seminars in the SEC Belt countries with the aim of identifying the main problems Vulnerable Road Users are facing. The output of the above mentioned seminars is an ETSC Policy Paper which was published in February 2005 and disseminated to key decision-makers at national and European level.

The Policy Paper identifies the risks and opportunities for improving the safety of Vulnerable Road Users in the SEC Belt and formulates more than 60 recommendations to EU and national policy makers in the three areas of road safety work: vehicles, infrastructures and users.

The Policy paper can be downloaded from the ETSC website.

## Data Working Party

The ETSC Working Party dealing with data collection, analysis and dissemination in the SEC Belt countries has met for the third time in Athens on 10 June 2005. The meeting has been an occasion to discuss and comment on the first draft of a new ETSC Review on road safety data.

This Review will not only provide an update of previous ETSC statistical work but will dedicate a substantial part of the analysis to the importance of obtaining quality data. The Review will also identify and promote clear policy recommendations for action at EU and Member State level. The Working Party will gather for the last meeting in the course of September 2005. The new Review is expected to be published by the end of the year.

## Evaluation Working Party

The Evaluation Working Party held its third meeting in March 2005 in Milan. During this meeting, all the contributions to the ETSC Review on evaluating national road safety policies were analysed and commented on by the Working Party members and a clear timescale towards publication was agreed. The last meeting, to be held in September 2005, will be dedicated to the analysis of the draft of the new Review. Publication is expected by the end of the year.

## ETSC's Yearbook

The editorial board has refereed the contributions received by the Secretariat in view of publishing them in the first ETSC's Yearbook on "Safety and sustainability". The ETSC Yearbook is dedicated to establishing links to other transport policy fields by addressing safety from an integrated risk management perspective. The Yearbook will be published in the course of the autumn.

## ETSC's Fact sheets

ETSC has published four more Fact sheets: one on "Seat belts and child restraints", another on "Cross border enforcement", a third one on "Alcohol interlocks", and a fourth one on "Road safety audit". All Fact sheets can be downloaded from the ETSC website.

## EAEC European Automotive Congress 2005

ETSC was invited to actively participate in this year's edition of the European Automotive Congress organised in Belgrade, Serbia and Montenegro, by EAEC (the European Automobile Engineers Cooperation), from 30 May to 1 June 2005. ETSC's Research Director, Antonio Avenoso, presented the SEC Belt project and discussed the role of ETSC in the EU road safety policy.


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