Seat Belt Reminders

Implementing advanced safety technology in Europe's cars

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European Transport Safety Council

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European Transport Safety Council

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The European Transport Safety Council

The European Transport Safety Council (ETSC) is an international non-governmental organisation which was formed in 1993 in response to the persistent and unacceptably high European road casualty toll and public concern about individual transport tragedies. Cutting across national and sectoral interests, ETSC provides an impartial source of advice on transport safety matters to the European Commission, the European Parliament and, where appropriate, to national governments and organisations concerned with safety throughout Europe.

ETSC brings together experts of international reputation and representatives of a wide range of national and international organisations with transport safety interests to exchange experience and knowledge and to identify and promote research-based contributions to transport safety.

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Executive Summary

This ETSC Policy Paper on "Seat Belt Reminders - Implementing advanced safety technology in Europe's cars" brings together evidence on how the development and introduction of seat belt reminders can contribute to saving lives in Europe. It aims to promote this innovative enforcement solution amongst manufacturers and policy makers, showing that it helps to maximise casualty reduction.

The Policy Paper shows that the level of seat belt use varies considerably among EU countries, despite the fact that wearing a seat belt is legally required in the EU. Only few countries show driver rates of 90% and over, and the highest rate is 97% (France). In passenger and rear seat positions the numbers are even lower. By raising wearing rates in all countries important safety gains can be achieved, taken into account that wearing a seat belt can reduce the risk of being killed in a crash by up to 60%.

The majority of non-users are not in principle against using a seat belt. These people can be persuaded to buckle up by state-of-the-art seat belt reminders that send out visual and auditory signals. Up to 99% of car drivers will use their belt if reminded by such a device. Moreover, people are likely to recognise its usefulness, and user acceptance increases with the experience. The costs for the implementation of seat belt reminders are small compared to the benefits.

The accelerated take up of seat belt reminders should be an EU road safety priority.

The accelerated take up of seat belt reminders should therefore be an EU road safety priority. In a first step, their installation should continue to be encouraged using EuroNCAP and other incentives. EuroNCAP has proven to be the prime driver for seat belt reminder market penetration. In a second step, the EU should pass legislation to ensure that all cars sold in Europe have seat belt reminders installed, not only in the front but also in the rear seat. This would bring the EU rules for type approval in line with earlier EU Directives requiring the installation and use of seat belts in all seating positions in the car.

Introduction

The European Union has set itself the ambitious target of halving road deaths by the end of 2010. But in its Mid-term Review of the 3rd Road Safety Action Programme in February 2006 the European Commission concluded that the EU is far from reaching this target. In 2005, approximately 41,600 people were killed on European roads, according to Commission estimates. This means a reduction of only 17.5% since 2001, some way off the 25% needed for the EU to be on course to achieve its target.

1 Seat belts – passive safety at its best

1.1 SEAT BELTS HAVE AN ENORMOUS SAFETY POTENTIAL

Research shows that using seat belts is a highly effective way of reducing serious and fatal injuries to car occupants. ETSC estimates that about 50% of front seat occupants dying in crashes in the EU-15 could survive if front seat usage rates were at 97% (ETSC 2003). Another study concludes that 6,000 deaths and 380,000 injuries could be prevented in the EU-15 if all car occupants used their seat belts (ICF Consulting 2003)[1].

6,000 deaths could be prevented in EU-15 if all occupants used their seat belts.

Even in countries with relatively high rates of seat belt use, like Sweden or Finland, many more lives could be saved. In Sweden with a 92% seat belt use rate, almost 40% of those killed as car occupants were unrestrained (Kullgren et al 2006). In Finland, with a seat belt use rate of 89% among front car occupants in 2003, 41% of those killed in car crashes were unrestrained (ETSC 2006).

1.2 BUT THIS SAFETY POTENTIAL IS PARTLY UNTAPPED

Despite the legal obligation for car and van occupants to wear seat belts in the EU, wearing rates still vary greatly across Europe. Between 59% and 96% of front seat occupants and between 21% and 90% of rear seat passengers used their seat belts in 2004 (Table 1).

Country	Wearing rate, front seats (%)	Wearing rate, rear seats (%)
Austria	77	56 (adults)
Belgium	66	n/a
Cyprus	n/a	n/a
Czech Republic	75 (driver)	n/a
Denmark	84	63
Estonia	75	21
Finland	89	80
France	97	68
Germany	94 (driver)	90 (adults)
Greece	40 (2003)	15 (2003)
Hungary	59	20 (2003)
Ireland	85 (2003)	46 (adults, 2003)
Italy	n/a	n/a
Latvia	n/a	n/a
Lithuania	n/a	n/a
Luxembourg	88 (driver)	72
Malta	95 (driver)	43
Netherlands	86 (2003)	63 (2003)
Poland	71	49
Portugal	88 (driver)	25
Slovakia	n/a	n/a
Slovenia	81	40
Spain	86 (2003)	42 (2003)
Sweden	92 (driver)	79
UK	93 (driver)	83

[1] ICF Consulting assumes Sweden to be the best performing Member State with wearing rates of 90% for drivers, 92% for front seat passengers and 80% for rear seat passengers (ICF Consulting 2003).

This shows that policy makers in many countries have not fully understood the safety potential of increasing seat belt use. However, some EU countries have undertaken major efforts recently to improve their rates. In Belgium, seat belt use among drivers went up from 53% in 2003 to 67% in 2004. In Denmark, the wearing rate for front seat passengers went up from 70% in 2003 to 84% in 2004. Also in the Netherlands, where the driver rate was as high as 86% in 2003, further improvement could be achieved in one year to 90% in 2004.

1.3 SEAT BELTS CUT INDIVIDUAL RISK BY UP TO 60%

Recent research suggests that the risk of dying in a crash could be reduced by about 60% by using the seat belt (WHO 2004, SWOV 2002). This is higher than the 40% reduction estimated in some older studies of the 1980s, probably due to the larger share of combinations with airbags, safer car construction, and higher average driving speeds today.

The risk of dying in a crash is reduced by about 60% by using the seat belt.

Earlier studies show that unrestrained motor vehicle occupants are three times more likely to be hospitalised in frontal crashes than those who were restrained (Fildes, Lane, Lenard & Vulcan, 1991) and up to seven times more likely to be killed (McLean, Aust, Brewer & Sandow, 1979).

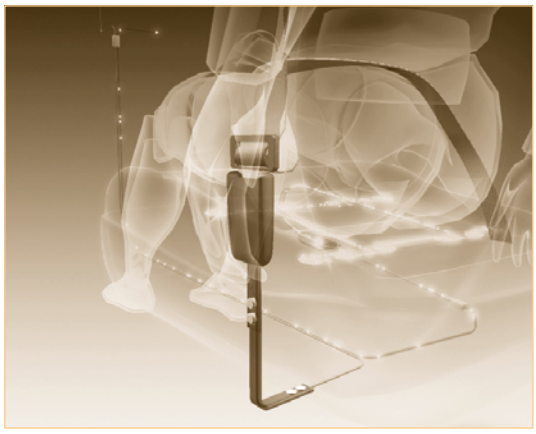
Also, other safety features are only effective in combination with seat belts. This is the case for airbags. Australian tests have shown that an airbag, in combination with a seat belt, at least halves the chance of a serious head injury (ATSB 2004).

Seat belt use by rear passengers is not only crucial to protecting this group but also to protecting the driver and front passengers. Studies have found that unbelted rear passengers - who are thrown forward into the back of the front seats - increase the risk of deaths for belted front-seat occupants nearly fivefold (Ichikawa et al 2002).

It has also to be noted that non-belted drivers also show other risky behaviour. As a result, they are involved in approximately 35% more crashes than belted drivers, independent of the severity of injuries suffered by the vehicle's occupants (ICF Consulting 2003).

1.4 HOW DOES THE SEAT BELT WORK?

Seat belts protect vehicle occupants during a collision in two ways. They reduce the frequency and severity of occupant contact with the vehicle's interior, and they prevent ejection from the vehicle (TRB 2003).



When a crash occurs, occupants are travelling at the vehicle's original speed at the moment of impact. Seat belts help prevent occupants from rapid and penetrating contact with the steering wheel, windshield and other parts of the vehicles interior immediately after the vehicle comes to a complete stop, reducing the deaths and injuries caused by this "second collision".

Seat belts also protect occupants from ejection, one of the most severe events that can occur in a collision. Car occupants ejected often end up under their own vehicle. Approximately half of the reduction of death risk from using seat belts in cars and light trucks can be traced to the prevention of ejection from vehicles.

In recent years, the effectiveness of seat belts has been improved by seat belt tensioners and belt load limiters. In the event of a crash, belt tensioners retract the belt and remove the slack from the belt. This allows the belt to have a restraining effect already in a very early

phase of the occupant's forward movement due to the crash deceleration. Belt load limiters control the force of the belt on the occupant's chest, avoid peak-loads, allow balanced energy absorption and a controlled forward movement of the occupant.

1.5 WHY WOULD PEOPLE NOT USE THEM?

Less than 1% of non users are totally against seat belts.

Most users are favourable toward using seat belts. But unlike automatic restraint systems, manual belts require action on the part of drivers and passengers.

There are at least two groups of non user: there are part-time users, who buckle up less than all the time, and hard-core non users, who never buckle up (TRB 2003). In Sweden, a study showed that only a very small fraction (approx. 1% of the non users) were hard-core non users and refused to wear seat belts on a more principal level. The most common reasons cited among part-time users for not using seat belts were simply that they had forgotten or that the trip was short (Dahlstedt 1999).

Part-time users appear to be the predominant non user group. Members of this group generally express positive attitudes towards seat belts but do not always buckle up. There are several reasons for this, which stem from a complex mix of situational, habitual and additional factors (TRB 2003).

- *Habitual factors:* Most non users have failed to develop belt-wearing habits and thus forget to buckle up. Harrison et al (2000) concluded that habit was the strongest factor for non use, while there was no real tendency that the non users had a negative attitude towards seat belt use.

- *Situational factors:* Some users buckle up in some driving situations but not in others (Harrison et al 2000). Studies showed that many part-time users did not wear seat belts in what they considered to be low-risk situations (Bentley et al 2003). These included short trips on familiar roads at relatively low speeds. Others choose to use seat belts only in situation of perceived risk (e.g. high speeds).

- *Attitudes and beliefs:* Non use of seat belts has been related to risk-taking and other problem behaviour.

- *Influence of belt comfort:* Belt use is also affected by ease of use and comfort of the belt system. For example, pressure or pain from seat belts was reported in studies as the most common complaint among those who disliked seat belts or found them annoying (Block 2001).

Hard-core non users are a much smaller segment of the non user group. They generally do not acknowledge the benefits of seat belts and are opposed to their use. Many hard-core non users object to being forced to buckle up, believing that belt use should be a matter of personal choice (Bentley et al 2003).

2 Seat belt reminders – key to improving wearing rates

2.1 WHAT IS A SEAT BELT REMINDER?

Seat belt reminders detect occupants and their seat belt use in all seating positions, and then create a series of alarms to alert the car occupant if he or she is not belted. There are different types of seat belt reminders – some issue only visual warnings while others issue both visual and auditory warnings. There are also systems that warn via increased upward pressure on the gas pedal.

Seat belt reminders are devices that send out a light and/or sound signal to alert the car occupant that he or she is not belted.

Seat belt interlocks

In the 1970's, an early seat belt reminder interlock system was introduced in the U.S. Interlocks were connected to both front seats so that the vehicle's engine would not start unless all front seat occupants had their seat belts fastened. Many consumers opposed the interlock because they believed that it infringed their personal freedom and reported difficulties experienced with the system (e.g. emergency situations). In 1974 the U.S. Congress withdrew the standard. As a consequence of this experience, recent seat belt reminder systems have tended to be less aggressive.

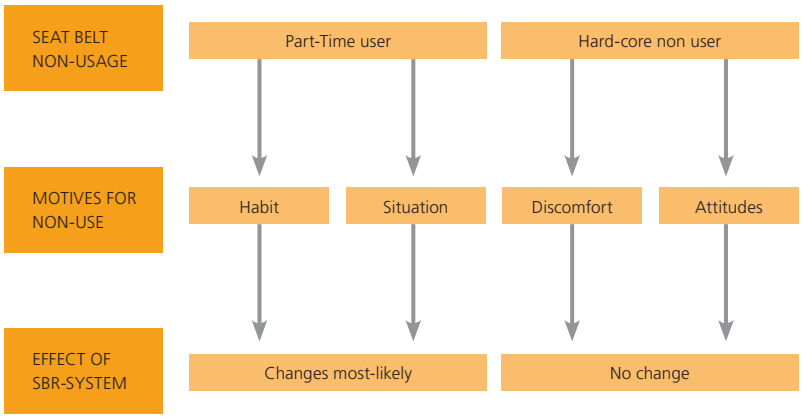
"The FIA believes that a series of basic technologies have to be deployed as soon as possible to guarantee a good level of road safety. (…) The simplest ideas are the best and are at the base of good innovation (e.g. seat belt reminders really do save lives!)"

FIA (EuroCouncil of the Fédération Internationale de l'Automobile - European Bureau)

2.2 TURNING "PART-TIME USERS" INTO "FULL-TIME USERS"

Seat belt reminders can help part-time users to develop habits of belt use. But they are likely to have little effect on hard-core non users who actively choose not to buckle up. More aggressive solutions, such as interlock systems, may be needed to encourage this small but important non user group to belt up.

Figure 1: Simplified Model of the Effect of Seat Belt Reminder Systems



Source: Harrison et al 2000

2.3 SEAT BELT REMINDERS FOR ALL SEATING POSITIONS

Seat belt reminders have been developed for all seating positions in the car but are to date most commonly fitted for the driver seat or for both front seats. In the front seats, seat belt reminder systems can be provided at minimal cost because sensors are already available to detect the presence of occupants for advanced airbag systems.

According to the automobile manufacturers and suppliers, rear-seat systems are more costly compared with front-seat systems. This is because rear-seat sensors are absent on many vehicles and their installation is complex (e.g. for removable seats, child seats). The industry also refers to lower rear-seat occupancy rates to explain the absence of seat belt reminders (TRB 2003).

However, lower-cost systems that alert the driver when rear-seat occupants have not buckled up or have unbuckled their belts during a trip are technically feasible and are currently available from some manufacturers. Studies assume that the benefit of full-scale rear-seat reminder systems could be significant due to the risks posed to all vehicle occupants by unbelted rear-seat occupants, particularly in more severe crashes (Ichikawa et al. 2002).

Seat belt reminders should be introduced to all seats in new vehicles in Europe.

It is therefore recommended that rear-seat reminder systems should be further introduced in all cars, to take advantage of the benefits of restrained rear occupants to the safety of both front and rear-seat occupants (TRB 2003).

While most seat belt reminders are fitted to new cars, reminder systems have also been developed for retrofit. The Swedish Road and Transport Institute (VTI) has concluded that a retrofit seat belt reminder for driver position would reduce road deaths in Sweden by about 7% yearly if it were fitted into 2 million Swedish cars. The newly developed retrofit reminder would cost approximately 150 SEK (ca. 17 EUR) (plus the same amount for fitting) in Sweden (Fildes et al 2004).

2.4 ADVANCED SYSTEMS ACHIEVE UP TO 99% SEAT BELT USE

A recent Swedish study has examined differences in driver's seat belt use in cars with or without different reminder systems (Kullgren et al 2006). The results of this study are remarkable:

- 99% of drivers used their seat belt in cars with the most advanced reminders (in compliance with EuroNCAP criteria);
- 93% of drivers used their belt in cars equipped with "mild" reminders producing a visual and a light sound signal;
- 82% of drivers used their belt in cars without seat belt reminders.

Seat belt reminders can achieve up to 99% seat belt use.

These findings are also consistent with earlier results achieved in other European and U.S. studies (Bylund/Björnstig 2001; Williams et al 2002). These studies have shown that advanced reminder systems with light and sound were the most effective systems.

2.5 COMMITTED TO SEAT BELTS - COMMITTED TO REMINDERS

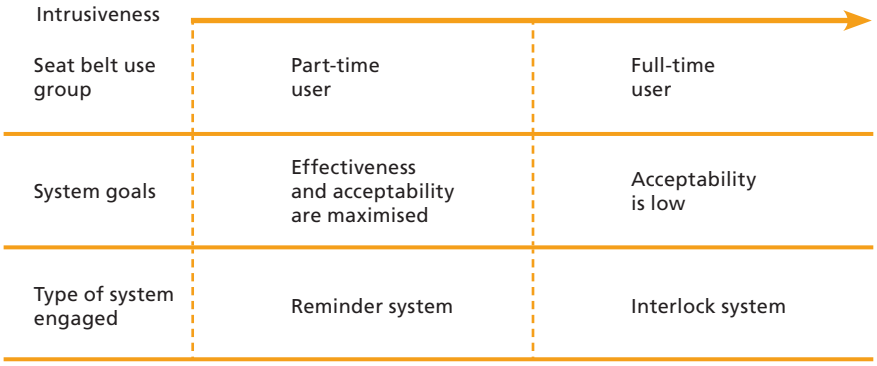
Seat belt reminder systems are likely to be well received by the majority of drivers in those countries that have a strong commitment to the use of seat belts (Regan et al 2001). Australians, for example, generally show a positive reaction to the prospect of the introduction of a seat belt reminder system. In a telephone survey, part-time non users agreed that a reminder system would help vehicle occupants to develop better seat belt wearing habits. Participants in this survey were however concerned about

the potential impact of the devices on vehicle prices, the reliability of the system and the volume of the reminder tone which should not interfere with the driving task (Harrison et al 2000). Similar attitudes to seat belt reminder systems were reported in 1998 among a group of Swedish road users (Fildes et al 2002).

Acceptability has been considered an important issue in the introduction of a seat belt reminder system (Fildes/Fitzharris 2002). Regan et al (2001) highlighted the "failed" starter interlock system requirement in the U.S. as an example of poor consumer acceptability of a device. But the mentioned interlock system was a very aggressive approach introduced at a time when it was not compulsory to wear a seat belt in most U.S. states and seat belt usage was very low. Today's attitudes towards vehicle safety and seat belts as well as the reminder systems are very different to those of the 1970s.

Seat belt reminders that are today on the market can combine a high effectiveness and acceptability which is crucial for part-time users. For hard-core non users, on the other hand, acceptability is not an issue and interlock systems should be considered (Fig. 2).

Figure 2: Types of systems and system goals necessary for effective and acceptable in-vehicle seat belt promotion technology



Source: adapted from Eby et al 2005

2.6 USERS APPRECIATE SEAT BELT REMINDERS – ALSO IN THE REAR SEAT

In the US, several manufacturers have gathered data on the acceptability of advanced seat belt reminders installed in their cars. A survey carried out by General Motors in 1999 showed that 49% of respondents reported that the tested reminder helps them remember to wear their seat belts. 81% indicated interest in an enhanced belt reminder system for the driver and front-seat occupants, and 71% thought that the systems should be extended to rear-seat occupants. Particularly drivers of sport utility vehicles (SUVs) and vans who frequently transport children found it difficult to see whether their children are buckled up (TRB 2003).

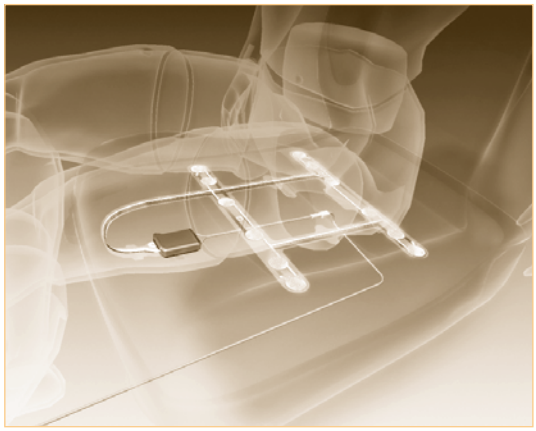
Another survey run by Ford in 2001 showed that 8 in 10 owners indicated that they would purchase a vehicle with a seat belt reminder again in the future. More than 7 in 10 would recommend the system to other drivers, and almost 90% of drivers wanted the system for their passengers (TRB 2003).

2.7 THE BENEFITS OUTWEIGH THE COSTS

A recent study carried out for Belgium by the Belgian Policy Research Centre for Traffic Safety has found that a seat belt reminder system would be beneficial to society even if it prompted only 5 to 15% of non users to fasten up over a period of ten years. Three types of seat belt reminders were taken into account, each with different level of intrusiveness and implementation costs of 63, 127 and 150 EUR. It was assumed that all new vehicles would be equipped with these reminders replacing the whole of the Belgian car fleet within 10 years. Costs and benefits for different levels of effectiveness were calculated. The findings were that

- with the least expensive seat belt reminder system, the introduction would already be beneficial when 5% of non users would use their belt due to the seat belt reminder;
- with the 127 Euro reminder, an effectiveness of 10% would already make the system beneficial;
- the most expensive system would become beneficial for society when an effectiveness between 10% and 15% would be reached. (Brabander/Vereeck 2003).

The European Transport Safety Council (ETSC) has undertaken a cost-benefit analysis for the mandatory introduction of audible seat belt reminders for front seats in 2004 (ETSC 2004). It was based on the assumption that roughly 50% of fatally injured front seat car occupants killed in the EU did not wear seat belts and that audible seat belt reminders for the front seat could increase seat belt wearing among front seat occupants to 97%. After twelve years of introduction, the costs would amount to about 11 million Euros while the benefit would be 66 million Euros. The cost-benefit ratio would be 1:6.



3 Seat belt reminders in Europe – state of play

3.1 SOUND QUALITY STANDARDS

In Europe, the introduction of advanced belt reminder systems began with a Swedish National Road Administration (SNRA) initiative in 1995. A special working group of researchers, insurance companies and the automobile industry was formed to develop generic specifications for a seat belt reminder system. The specifications took into account some of the shortcomings of the early U.S. interlock systems, which were unable to differentiate between driving and low-speed manoeuvres, such as parking or going in reverse. New systems based on these criteria activate only after a specified minimum speed has been reached, or after a specified time or distance

Based on the Swedish experience, the European Enhanced Vehicle-Safety Committee (EEVC) also initiated a working group on seat belt reminders. In 2002, this group reported a set of recommendations that reminder systems should comply with (Kullgren et al 2006):

- Seat belt reminders should target part-time users, i.e. people who understand the value of a seat belt but sometimes do not use it.
- They should not affect the driveability of the vehicle.
- A combination of visual and sound signals should be used.
- The reminder signal should use multiple steps, i.e. build up progressively.
- Seat belt reminders should also be expanded to the rear seats.

3.2 SEAT BELT REMINDERS FOR A 5 STAR OCCUPANT RATING

Also in 2002, the European New Car Assessment Programme (EuroNCAP) developed a first protocol that allows additional points to be given under the occupant protection rating if a certain type of seat belt reminder is fitted. This protocol was inspired by the work in EEVC working group and includes the following minimum requirements and recommendations for seat belt reminders.

Immediate start: The reminder system should start at the commencement of each journey that the vehicle makes. Once a journey has started, short breaks up to 30 seconds are permitted, in which the reminder system is not required to start again (e.g. stalling of the engine).

EuroNCAP ratings have included points for seat belt reminder since 2002.

Progressive warning: EuroNCAP recommends that an audio and/or visual initial signal is started, shortly after the ignition is switched on or shortly after the vehicle starts to move and one or more seat belts are not in use. Also recommended is an intermediate signal like a text or voice message. The audiovisual final signal is the only signal required by EuroNCAP. The final signal must start at the least when the engine has been running for 60 seconds or the car has been in forward motion for 500 meters or has reached a speed of 25 km/h. The duration of the final signal must be at least 90 seconds.

Rear seat reminders: In the absence of seat occupancy information, EuroNCAP requires a visual signal for rear seat positions. The signal must start within 5 seconds of starting the engine or when the car is in forward motion at more than 10 km/h. The duration of the signal must be at least 30 seconds.

Signal: The signal for front seat positions must be both audio and visual. The audible component must be "loud and clear", for the driver and all relevant passengers. The signals for rear seating positions need only to be visual.

Deactivating the system: The reminder system may be designed to allow a short term deactivation. This must be more difficult than putting the seat belt on and off once. Short term deactivation should only affect the seating position for which the deactivation has been chosen. It should not affect the operation for other seating positions. This requirement will be applied to any assessments after the release of the EuroNCAP Phase 17+ results. Long term deactivation must require a sequence of operations, which could not be guessed at or carried out accidentally.

For systems which fully comply with the EuroNCAP requirements, the following scoring points will be added to the overall occupant protection score for a vehicle:

• *Driver*	
Driver's seating position	1 point
• *Front passenger seats*	
All front passenger seating positions	1 point
• *Single row rear passenger seats*	
All rear passenger seating positions	1 point
• *Multiple row rear passenger seats*	
For each of "n" rear passenger seats	1/n point

95% of the cars rated highest for occupant protection are fitted with seat belt reminders at least on the driver's seat.

Manufacturers have accepted the challenge. Since the introduction of the new protocol, 95% of the cars that received the best EuroNCAP rating for occupant protection were fitted with seat belt reminders at least on the driver's seat.

In Europe[2], 57% of all cars that were newly registered in 2005 were equipped with seat belt reminders for the driver. In Sweden, this percentage was 70%.

[2] This estimate is based on car sales in 25 European countries (EU-25 except Malta and Cyprus, but including Switzerland and Norway).

4 Seat belt reminders for all seats in European cars - how to get there

Given the great potential of this technology, seat belt reminders should be introduced to all seats in new vehicles in Europe. Their installation should first be extended to all front seats, then to back seats. In parallel, retro-fitting of vehicles with seat belt reminders to all seats should be developed.

This can be achieved through a combination of measures. Firstly, measures should be taken to encourage the use of this technology. This also includes communications and awareness raising on the safety benefits of seatbelt reminders and cars which have seat-belt reminders. Secondly, legislation should aim to achieve a close to 100% wearing rate amongst all EU drivers and passengers. European legislation on obligatory installation of seat-belt reminders should also be introduced.

4.1 ENCOURAGING CONSUMERS TO CHOOSE CARS WITH SEAT BELT REMINDERS

Governments should provide incentives to consumers to purchase cars with seat-belt reminders. This could take the form of tax breaks on cars that have seat-belt reminders. But Governments and the European Commission can also encourage and support initiatives by the insurance sector for consumers to choose cars with seat-belt reminders. This should consider that premiums reflect both the first party costs (generally damage to the driver's own vehicle) and third party costs (generally damage to property outside of the driver's vehicle, but also injury costs for passengers in the driver's vehicle where the driver is at fault).

Government could also play a role in promoting safety as a criterion for consumers to consider through running consumer awareness campaigns on purchasing safe cars which have seatbelt reminders.

Non-private customers should include seat-belt reminders in their vehicle purchase and leasing policies.

In many countries a large proportion of new sold cars are purchased by non-private customers. For example in Sweden and Germany this figure is approximately 40%. Therefore, all non-private customers, such as governmental bodies, local authorities and companies could play an important role by including seat-belt reminders in their vehicle purchase and leasing policies. Governments should encourage such initiatives.

4.2 PROVIDING INCENTIVES FOR MANUFACTURERS TO PRODUCE THEM

As consumers take more of an interest in purchasing safe cars, manufacturers' motivation to gain full marks by including seat-belt reminders in the EuroNCAP rating rises. Primarily, governments and the European Commission should be encouraged to promote EuroNCAP amongst car manufacturers. At present not all makes and models of passenger cars are tested within EuroNCAP. Secondly, more countries should be encouraged to join the EuroNCAP programme. This will give member countries an enhanced basis for providing the right information to consumers.

The Swedish example shows that a combination of incentives, combined with a strong road safety culture, can yield impressive results. In Sweden, the proportion of cars equipped with seat belt reminders increased from 58% in 2004 to 80% in 2005. Car users prefer seat belt reminder systems using increasing signal levels (Kullgren et al 2006).

4.3 REQUIRING SEAT BELT REMINDERS IN NEW CARS

As a last step, EU legislation should be passed that requires seat belt reminders in all seating positions in all new cars. In a stepwise approach, reminders should be required in all new models within a timeframe of 5 years and for all new cars within a frame of 10 years. Moreover, seat belt reminders should be required first in the front seats, then in the other positions. This would not only speed up the implementation of seat belt reminders in Europe. It would also bring the EU's rules for vehicle type approval in line with earlier EU Directives requiring the installation and use of seat belts in all seating positions in the car.

EU legislation should be passed that requires seat belt reminders in all seating positions in new cars.

The CARS 21 High Level Group has included EU regulation on seat belt reminders in its 10 year road map for the automotive industry in Europe. This roadmap was published in December 2005. The European Commission is expected to present its view on the proposals before the end of 2006.

This paper has shown that thousands of lives could be saved every year through increased seat belt wearing levels. It has also shown that both the standards and the technology meeting these standards are available today. Seat belt reminders are on the market and users appreciate them. It is now time to reap the full benefits of this technology using the full tool kit available to the European Union to improve road safety, including legislation.

CARS 21 is an initiative launched by Industry Commissioner Verheugen to boost the competitiveness of the European car industry. A High Level Group composed of representatives of the European Commission, national governments and industry was set up to formulate proposals. There has also been a stakeholder consultation. The final report includes a number of recommendations which aim to enhance the European automotive industry's global competitiveness and employment while sustaining further progress in safety performance at a price affordable to the consumer.

This includes the following vehicle measures:

- Electronic Stability Control (proposal 2007)
- Seat Belt Reminders (proposal 2007)
- Brake Assist Systems
- Heavy Duty Vehicles' rear view vision (blind spots) (proposal 2006) and conspicuity (proposal 2007)
- Isofix child seats (adoption 2006)
- Daytime running lights (proposal 2007)

See **http://ec.europa.eu/enterprise/automotive/pagesbackground/competitiveness/cars21.htm**

"BEUC is pleased that the Cars 21 group recommends the inclusion in the Cars 21 road safety roadmap of various automotive technologies, such as electronic stability control, seatbelt reminders and brake assist systems, Isofix child seats and daytime running lights. (…) We think seat belt reminders should be envisaged for all seats and occupants."

BEUC (The European consumer's organisation)

4.4 ETSC RECOMMENDATIONS

European Commission

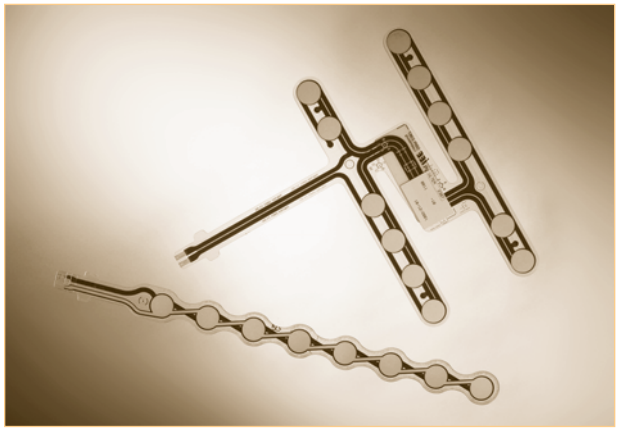
- The European Commission should include seat belt reminders to type approval in its CARS 21 Communication outlining the regulatory framework for the next 10 years.
- The European Commission should then adopt legislation according to this timetable to ensure that every new car has as standard equipment an enhanced seat belt reminder system for front and rear seat occupants with audible and visual warnings.

Member States

- Member States should provide, in co-operation within the EU, tax breaks for cars with seat belt reminders.
- They should encourage motor insurers to lower insurance premiums for drivers of vehicles with seat belt reminders.
- They should run campaigns informing drivers of the benefits of this technology.

Vehicle Manufacturers

- Vehicle manufacturers should continue to introduce seat belt reminders to new models.



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Notes

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