



# CRASH

ETSC's Newsletter on European Vehicle Crash Protection

APRIL 2000

Afgiftekantoor - Bureau de dépôt : 1040 Bxl 4



## SUMMARY

### MANDATORY FRONTAL UNDERRUN PROTECTION ON TRUCKS

- Commission proposal in final stages of approval. Expected to apply to all new trucks by 2003.

### SAFER CAR FRONT PROPOSAL DUE SHORTLY

- In a new road safety communication the Commission have confirmed their support for a new pedestrian protection proposal as one of six cost-effective priorities for early action. Industry Commissioner, Erkki Liikanen indicates to ETSC a Spring deadline.

### EURONCAP PHASE 7 RESULTS – SMALL CARS

- Latest EuroNCAP results reveal further improvements for car occupants though child restraint performance is disappointing. New pole test introduced.
- Pedestrian tests results continue to reveal poor performance of new cars.
- Parliamentarian criticises car industry for ignoring life-saving pedestrian protection designs and renews all party call for EU legislation.

### NEW ETSC REVIEW ON PRIORITIES FOR VEHICLE SAFETY DESIGN

- Co-financed by the European Commission, ETSC's vehicle safety experts have just started a new review of priorities for safety design.

### MANDATORY FRONTAL UNDERRUN PROTECTION ON TRUCKS

A new EU Directive requiring all new trucks over 3.5 tonnes to be designed to prevent the serious crash consequences of the fronts of cars underrunning the fronts of lorries is expected to be agreed shortly. It went through its Parliamentary stage without discussion and is expected to be approved in Council within weeks.

ETSC estimates that this measure which introduces rigid devices could save around 1000 lives annually on EU roads.

A further 500 lives could be saved if deformable front underrun protection systems were provided and ETSC will press for early EU action in this area.

Improvements are also needed in EU legislation aimed at preventing cars underrunning the rear of lorries and for the mandatory provision of effective side guards for cyclist protection.



### COMMISSION WILL INTRODUCE PEDESTRIAN PROPOSAL IN SPRING

The Industry Commissioner, Erkki Liikanen has promised that a proposal on safer car fronts for pedestrians and cyclists will be introduced this Spring.

On 17<sup>th</sup> March, the Commission confirmed in a new road safety communication that a legislative proposal was one of six top priority

cost-effective measures to receive attention. Other crash protection items on the list include further support for EuroNCAP and new legislation on seat belts.



### EuroNCAP RESULTS (7a) – SMALL CARS

In the first set of crash test results on small cars this year, two superminis achieved the top four star rating for car occupant protection.

Make & model	Front and Side	Pedestrian
Fiat Punto	****	**
VW Lupo	****	**
MCC Smart	***	**
Hyundai Atoz	***	**
Vauxhall Corsa	***	**
Honda Logo	***	**
Lancia Ypsilon	**	**

In the second set of tests, paid for by the manufacturers, all cars received four stars for car occupant protection. EuroNCAP has now extended the scope of assessment for performance in side impacts, increasing the total number of stars available from 4 to 5. To encourage manufacturers to fit head protection devices, a pole test is carried out at 29 kph has been included for the first time.



### EuroNCAP RESULTS (7+)

Make & model	Front and Side	Pedestrian
VW Beetle	****	**
Mercedes A class	****	Not avail.
Honda Accord	****	**
Saab 9.3	****	*
Volvo S80	****	**
Mercedes E class	****	**
Saab 9.5	****	**
Volvo S70	****	**

In both sets of results, however, the performance of all cars in the pedestrian tests continued to be poor.

Commenting on the Phase 7a pedestrian results, the UK Transport Minister, Lord Macdonald urged car manufacturers to use the expertise already demonstrated in enhancing car occupant safety to improve matters for pedestrians as well.

Mark Watts MEP said: “The car industry clearly isn’t prepared to design in voluntarily protection

measures that would save lives and prevent serious disabling injuries to people who find themselves in collision with vehicles. Children and elderly people are the most at risk.

Only urgent legislation by the EU can deliver the predicted savings – up to 2,000 lives and 19,000 serious injuries per year on Europe’s roads can be saved if safer designs are made compulsory.”

He said the European Parliament believed this was a priority road safety measures and would find any further delay totally unacceptable.



### EuroNCAP PEDESTRIAN TEST RESULTS

Since 1996, four tests have been used in the European New Car Assessment Programme (EuroNCAP), which provides consumer information ratings on the crash test performance. Seven sets of results published since the start of this programme (see opposite) show that current car designs do not fulfil pedestrian protection specified by the European Enhanced Safety of Vehicles Committee (EEVC).



### NEW CAR PERFORMANCE IN EURO NCAP PEDESTRIAN TESTS

MAKE	MODEL	STAR RATING ****=Max.pos
<b>PHASE I</b>		
Fiat	Punto	*
Ford	Fiesta	*
Nissan	Micra	**
Renault	Clio	*
Rover	100	**
Vauxhall/Opel	Corsa	*
VW	Polo	*
<b>PHASE II</b>		
Audi	A4	**
BMW	3 Series	**
Citroen	Xantia	*
Ford	Mondeo	**
Mercedes	C-Class	**
Nissan	Primera	**
Peugeot	406	**
Renault	Laguna	**
Rover	600	**
Saab	900	**
Vauxhall/Opel	Vectra	**
VW	Passat	**
Volvo	S40	**

<b>PHASE III</b>		
Audi	A3	**
Citroen	Xsara	**
Daewoo	Lanos	**
Fiat	Brava	**
Honda	Civic	**
Hyundai	Accent	**
Mitsubishi	Lancer	**
Peugeot	306	*
Renault	Megane	*
Suzuki	Baleno	**
Toyota	Corolla	**
VW	Golf	**
Toyota	Avensis	**
<b>PHASE IV</b>		
Audi	A6	**
BMW	5 Series	*
Mercedes	E-Class	**
Saab	9.5	**
Toyota	Camry	**
Vauxhall/Opel	Omega	**
Volvo	S70	**
<b>PHASE V</b>		
Ford	Focus	**
Ford	Escort	**
Mercedes	A-Class	Not rated
Nissan	Almera	*
Vauxhall/Opel	Astra	*
<b>PHASE VI</b>		
<b>VW</b>	Sharan	**
<b>Mitsubishi</b>	Space Wagon	**
<b>Vauxhall</b>	Sintra	*
<b>Chrysler</b>	Voyager	*
<b>Renault</b>	Espace	**
<b>Toyota</b>	Picnic	**
<b>Peugeot</b>	806	*
<b>Nissan</b>	Serena	**
<b>PHASE VIIa</b>		
Fiat	Punto	**
VW	Lupo	**
MCC	Smart	**
Hyundai	Atoz	**
Vauxhall	Corsa	**
Honda	Logo	**
Lancia	Ypsilon	**
<b>PHASE VIIb</b>		
VW Beetle	Beetle	**
Mercedes	A Class	Not avail
Honda	Accord 1.81LS	**
Saab	9.3	*
Volvo	S80	**
Mercedes	E class	**
Saab	9.5	**
Volvo	S70	**



### **EEVC TO PREPARE SEAT BELT REMINDER SPECIFICATION**

Working Group 16 of the European Enhanced Safety of Vehicles Committee (EEVC) has just started work on a specification for seat belt reminder systems.

Seat belt reminders are intelligent devices which detect whether or not seat belts are in use in different seating positions and give out increasingly aggressive warning signals until the belt is used. The technology is there and various car manufacturers are experimenting with different systems. User trials have been conducted in Sweden and have shown so far higher rates of seat belt use with audible warnings. The National Society for Road Safety in Sweden estimates such devices could save at least 20 per cent of car deaths.

Addressing a Passive Safety Network Conference in Brussels in March, ETSC's Executive Director, Jeanne Breen welcomed this initiative and said the scope for saving lives through higher seat belt use was about 7000 lives across the EU annually. Publicity alone clearly was not enough and there was insufficient police enforcement. In-vehicle measures could make a very cheap contribution to encouraging safe behaviour.

In preparation for the results of this work which are expected to be available within a reasonably short timescale the EU should start to consider the appropriateness of an EU mandatory requirement.



### **NEW ETSC REVIEW OF PRIORITY MOTOR VEHICLE SAFETY DESIGN NEEDS**

As part of its current programme, which receives matched funding from the Commission's Energy and Transport Directorate, ETSC is carrying out a review of future priority needs for motor vehicle safety design. The review focuses on the role of design in reducing serious, disabling and fatal injury-producing crash injuries to feed into discussion on EU Whole Vehicle Type Approval and the EU research programme.

The study will look at all types of motor vehicles from two-wheeled motor vehicle to heavy goods vehicles and at designs which affect not only the occupants of motor vehicles but the other road users which motor vehicles hit. All strategies will be considered— crash prevention, crash protection and post impact care. In addition developments as regards information and design tools: crash information recorders, in-depth crash data, biomechanics and dummy development will be reviewed.

The ETSC review which will be published next Spring will make recommendations on priorities for EU legislation, consumer information and for research and development.



## INTERNATIONAL EVENTS DIARY

- 28-31 May 2000 17<sup>th</sup> World Congress of the International Association for Accident and Traffic Medicine, Stockholm, Sweden. Contact Gerd Nyman. Fax: +46 8 30 25 07, E-mail: nyman.gerd@swipnet.se, Internet: www.IAATM2000.com.
- 7-9 June 2000 Vehicle Safety 2000, London, UK. Organised by the Institution of Mechanical Engineers (Automobile Division). Contact Anna Chapman, Tel: + 44 171 973 1291, Fax: +44 171 222 98814.
- 6-8 Sept. 2000 Icrash 2000, International Crashworthiness Conference, London, UK. Organised by the International Journal of Crashworthiness, the Bolton Institute. Contact Lorna Hollingham, Icrash 2000 Conference, Faculty of Technology, The Bolton Institute, Dean Road, Bolton BL3 5AB, United Kingdom, Tel: +44 1204 903834, Fax: +44 1204 381107, E-mail: lh2@bolton.ac.uk; Internet: www.technology.bolton.ac.uk/icrash2000.
- 12 Sept. 2000 "Best in Europe: road safety conference" Brussels symposium, ETSC, info@etsc.be
- 20-22 Sept. 2000 The International Research Council on the Biomechanics of Impact organises the 2000 IRCOBI Conference on the Biomechanics of Impact, in Montpellier (France). Contact Antoinette Charpenne, IRCOBI Secretariat/INRETS, 25 avenue Francois Mitterand, Case 24, 69675 BRON Cedex, France, Tel: +33 4 72 14 24 20, Fax: +33 4 72 14 23 60, E-mail: charpenne@inrets.fr.

This newsletter has been compiled with the assistance of ETSC's Vehicle Safety Working Party. The contents of CRASH are the sole responsibility of ETSC and do not necessarily reflect the views of its sponsors. ETSC is grateful for the financial support provided for CRASH by:

- **DG TREN European Commission**
- **BP Amoco**
- **KeyMed**
- **Railtrack**
- **Scania**
- **Shell International**

© ETSC 2000

Bureau de dépôt - Afgiftekantoor: 1040 Bxl 4

**ETSC Board of Directors:**

Professor Herman De Croo  
Professor Manfred Bandmann  
Professor G. Murray Mackay  
Professor Kåre Rumar  
Pieter van Vollenhoven

**Executive Director & Editor:**

Jeanne Breen

**For information about ETSC's activities & membership contact:**

ETSC, 34 rue du Cornet - Hoornstr. 34, B-1040 Brussels.

Tel: + 32 2 230 4106, Fax: +32 2 230 4215

E-mail: [info@etsc.be](mailto:info@etsc.be), Internet: [www.etsc.be](http://www.etsc.be)