

Automotive Safety in the UN Decade of Action

Presentation by

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Europe Asia Road Safety Forum
UNECE Working Party on Road Traffic Safety
New Delhi, India
4th December 2013



GLOBAL NCAP
www.globalncap.org



Global NCAP For Safer Cars...Worldwide

The first NCAP was launched in 1978 by the US National Highway Traffic Safety Administration.

NCAPs help to create a 'market for safety' by raising awareness of the car buying public, and rewarding manufacturers that build the safest cars.

There are now nine NCAPs or similar bodies active in Asia, Australia, Europe, Latin America and the USA.

In 2011 Global NCAP was launched as a UK registered charity which aims to:

- offer support to New Car Assessment Programmes in emerging economies and regions by offering technical support guidance and quality assurance.
- provide a platform for cooperation for NCAPs and like organisations around the world to share best practice, and exchange information.



Auto Safety's Winning Formula: Regulatory Push & Demand Pull

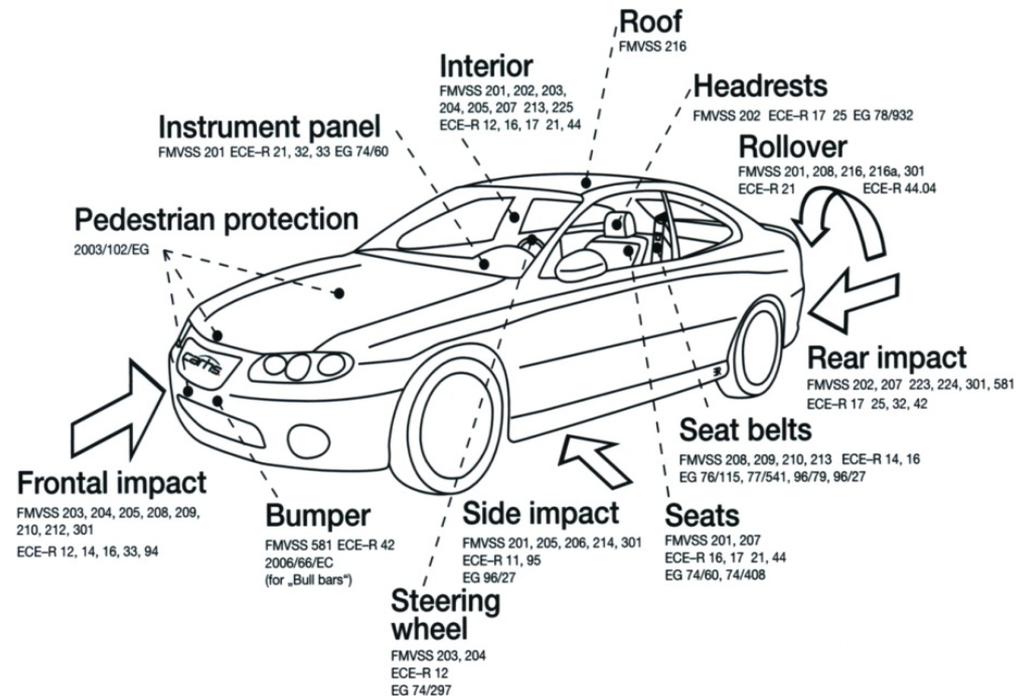
After a forty year effort motor vehicles in the major industrialised countries are safer than ever before.

This is the result of “regulatory push” and “demand pull”. The combination of national and UN safety standards and consumer information promoted by NCAPs have created a market for safer vehicles.

The challenge now is to extend this progress to the rapidly motorising regions of Asia, Africa and Latin America.



Crash-Regulations in Europe and USA



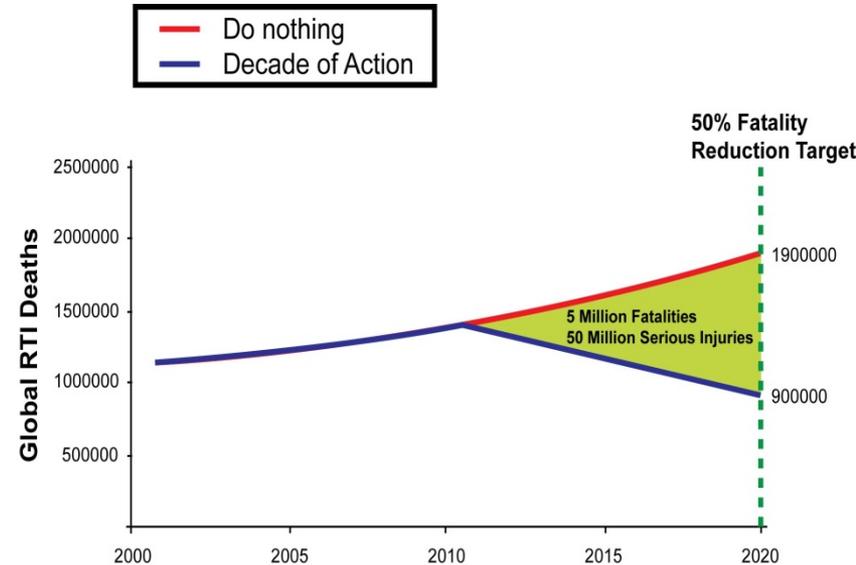
UN Decade of Action 2011-2020

The Decade's goal is to *'stabilize and then reduce the level of road fatalities'*. This would bring a 50% reduction in the forecast level of fatalities by 2020 and avoid five million deaths, 50 million injuries and \$3 trillion in social costs.

The Decade is supported by a Global Plan for the Decade with five pillars:

1. Building Management Capacity
2. Encouraging Safer User Behaviour
- 3. Building Safer Vehicles**
4. Building Safer Roads
5. Improving Post Crash Care

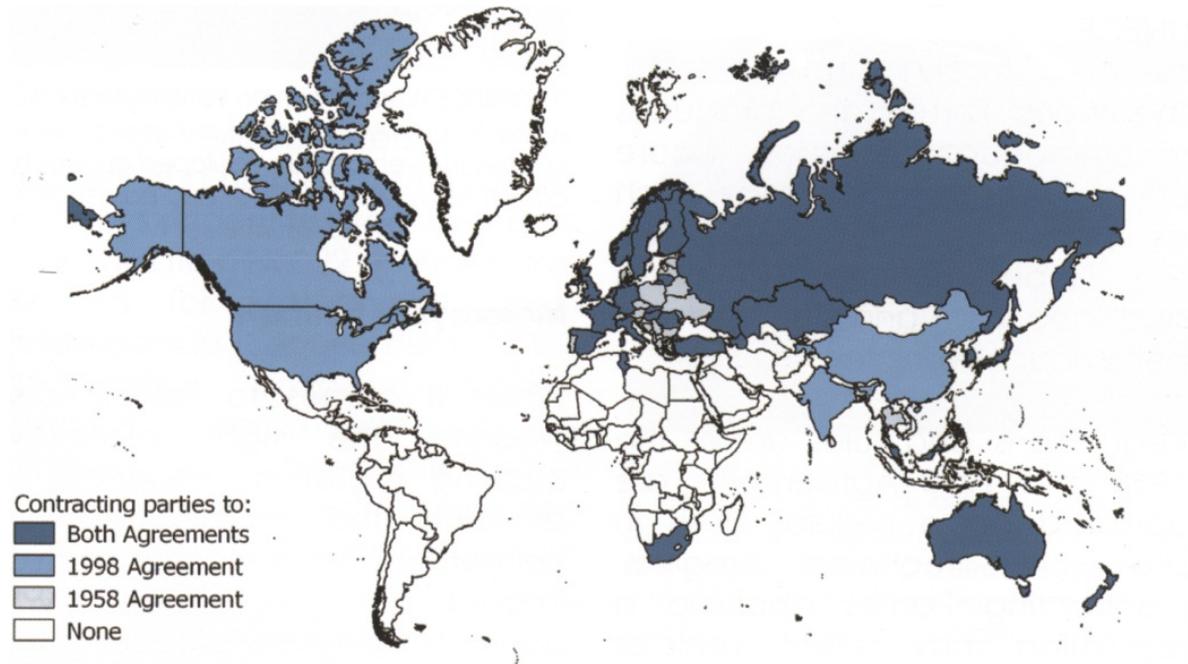
The Decade Plan includes seven recommended activities in 'pillar three' to promote vehicle safety



Decade Plan for Safer Vehicles – Activity 1

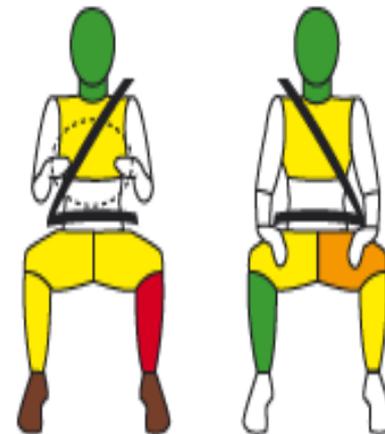
Encourage Member States to apply and promulgate motor vehicle safety standards as developed by the UN's World Forum for the Harmonization of Vehicle Regulations (WP 29).

1958 Agreement
1998 Agreement



Decade Plan for Safer Vehicles – Activity 2

Encourage implementation of New Car Assessment Programmes in all world regions to increase the availability of consumer information about the safety performance of motor vehicles.



PROTECTION

- GOOD
- ADEQUATE
- MARGINAL
- WEAK
- POOR

Latin NCAP Progress Report

Since 2010 Latin NCAP has tested 34 cars. The results show that the regions top selling cars are twenty years behind European or American safety standards. However, there are signs of progress with more four star cars on the market.

In July the first ever five star result was awarded to the Seat New Leon.



RESULTADOS FASES I, II, III y IV					
Seat NUEVO LEÓN* - FIV	✓ 6	★★★★★	★★★★★	Protocolos 2013	
Ford ECOSPORT - FIII	✓ 2	★★★★☆	★★★★☆		
Toyota COROLLA XEI - FI	✓ 2	★★★★☆	★★★☆☆	Test comparativo	
Ford FOCUS STYLE* - FII	✓ 2	★★★★☆	★★★★☆		
Chevrolet CRUZE* - FII	✓ 2	★★★★☆	★★★★☆		
Nissan TIIDA HATCHBACK* - FII	✓ 2	★★★★☆	★★★☆☆		
Suzuki CELERIO* - FIV	✓ 2	★★★★☆	★★★☆☆	Protocolos 2013	
Toyota ETIOS HATCHBACK* - FIII	✓ 2	★★★★☆	★★★★☆	Válido sólo para Brasil	
Ford NEW FIESTA - FIV	✓ 2	★★★★☆	★★★★☆		
Honda CITY* - FII	✓ 2	★★★★☆	★★★★☆	No válido para México, Chile y América Central	
Renault FLUENCE* - FIII	✓ 2	★★★★☆	★★★☆☆		
VW POLO* - FIV	✓ 2	★★★★☆	★★★★☆	Válida sólo para Brasil	
Fiat PALIO ELX 1.4 EMOTION* - FII	✓ 2	★★★★☆	★★★☆☆		
Hyundai HB20 HATCHBACK - FII	✓ 2	★★★★☆	★★★☆☆		
VW CLÁSICO (BORAI) - FIII	✓ 2	★★★★☆	★★★★☆		
VW GOL TREND 1.6* - FI	✓ 2	★★★★☆	★★★☆☆		
Nissan TIIDA HATCHBACK - FII	✓ 1	★★★★☆	★★★☆☆		
Chevrolet MERIVA GL PLUS - FI	✓ 2	★★★★☆	★★★☆☆	Test comparativo	
Nissan MARCH* - FII	✓ 2	★★★★☆	★★★☆☆	Válida sólo para Brasil	
Peugeot 207 COMPACT 5p 1.4* - FI	✓ 2	★★★★☆	★★★★☆		
Peugeot 207 COMPACT 5p 1.4 - FI	✗	★★★★☆	★★★★☆		
VW GOL TREND 1.6 - FI	✗	★★★★☆	★★★★☆		
Fiat PALIO ELX 1.4 - FI	✗	★★★★☆	★★★★☆		
Renault SANDERO - FII	✗	★★★★☆	★★★★☆		
Chevrolet CELTA - FII	✗	★★★★☆	★★★★☆		
JAC J3 - FIII	✓ 2	★★★★☆	★★★★☆	Válida sólo para Brasil	
Ford KA FLY VIRAL - FII	✗	★★★★☆	★★★★☆		
Chevrolet CORSA CLASSIC - FII	✗	★★★★☆	★★★☆☆		
Fiat NOVO UNO - FII	✗	★★★★☆	★★★★☆		
Geely CK1 1.3 - FI	✗	★★★★☆	★★★☆☆		
Nissan TSURU [SENTRA B13] - FIV	✗	★★★★☆	★★★☆☆	Protocolos 2013	
Renault CLIO MIO - FIV	✗	★★★★☆	★★★☆☆	Protocolos 2013	
Chevrolet AGILE - FIV	✗	★★★★☆	★★★☆☆	Protocolos 2013	
Suzuki ALTO K10 - FIV	✗	★★★★☆	★★★★☆	Protocolos 2013	

*Patrocinados por fabricantes



ASEAN NCAP Progress Report



ASEAN NCAP's first phase tests focussed on the small and sedan passenger car. The results were launched in January 2013 and comprised 7 models and 8 ratings. The star ratings varied from 1 to 5 stars. The cars tested were the Ford Fiesta, Honda City, Hyundai i10, Nissan March, Perodua MyVi, Proton Saga and Toyota Vios.

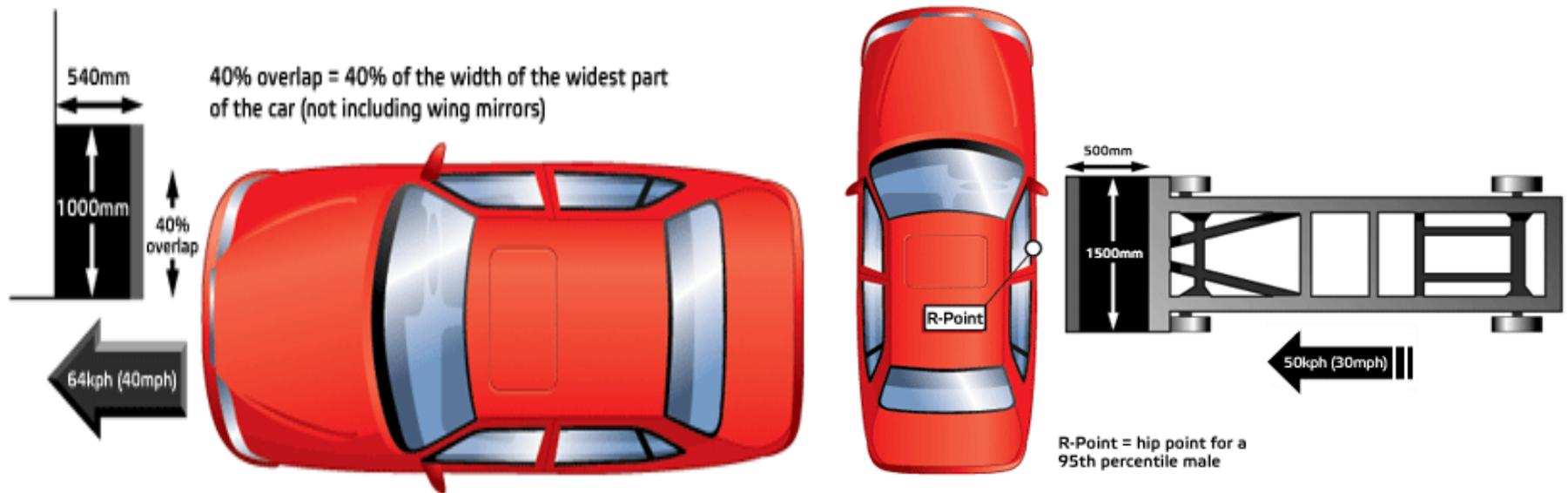
Phase Two results were released in August. For this phase eleven cars were crash tested; the Toyota Prius, Honda Civic, Subaru XV, Suzuki Swift, Mazda 2, Mitsubishi Mirage, Toyota Avanza, Perodua Alza, Nissan Almera, Daihatsu Xenia and Mitsubishi Pajero Sport.

Most cars achieved a four star rating, and the Toyota Prius, Honda Civic and Subaru XV each achieved 5 stars.



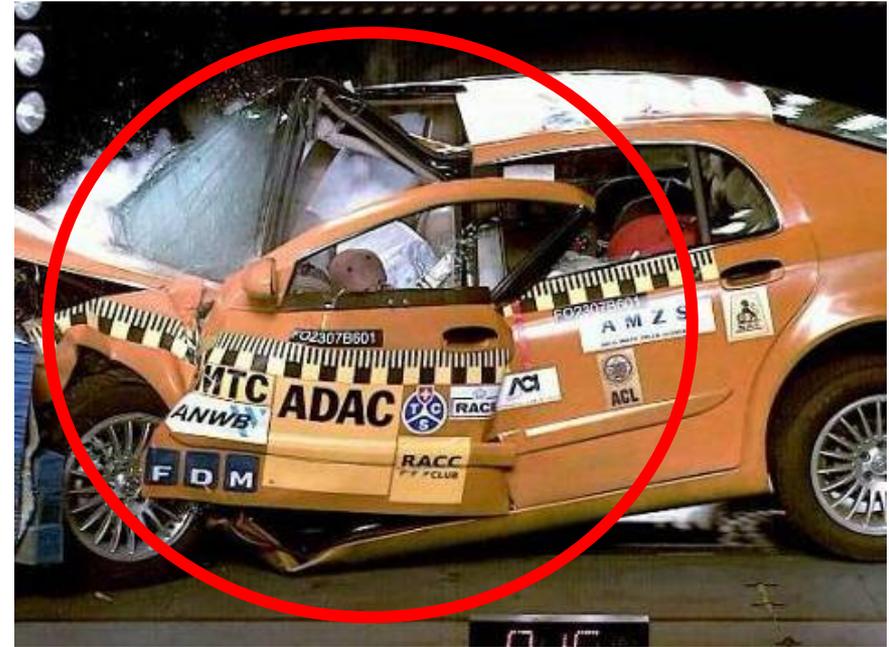
Decade Plan for Safer Vehicles – Activity 3

Encourage agreement to ensure that all new motor vehicles are equipped with seat belts and anchorages that meet regulatory requirements and pass applicable crash test standards (as minimum safety features).





No airbag and poor body shell integrity gives zero stars. But just adding an airbag (see below) makes no difference...



The combination of good body shell integrity and an airbag results in a survivable crash.

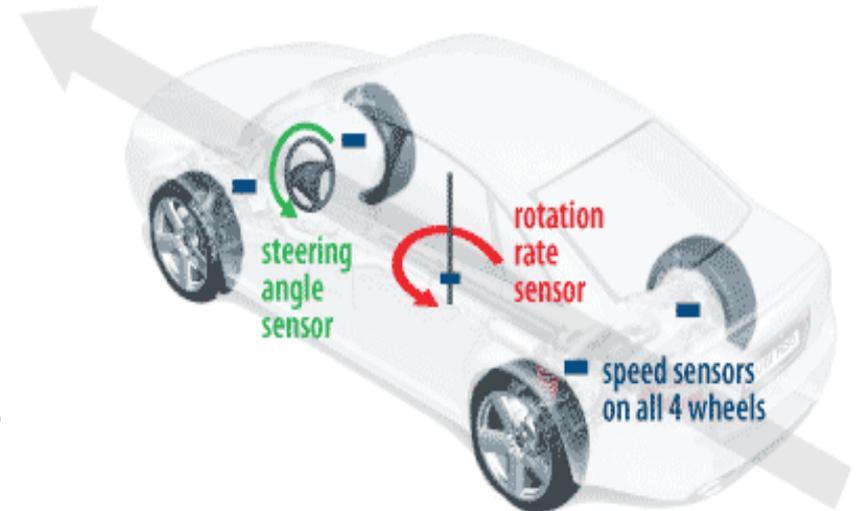
Decade Plan for Safer Vehicles – Activity 4

Encourage global deployment of crash avoidance technologies with proven effectiveness such as Electronic Stability Control and Anti Lock Braking Systems (ABS) in motorcycles.

ESC works in conjunction with ABS and avoids loss of control skidding incidents (under steer or oversteer) . It is recognised to be the most important safety device since the seat belt.

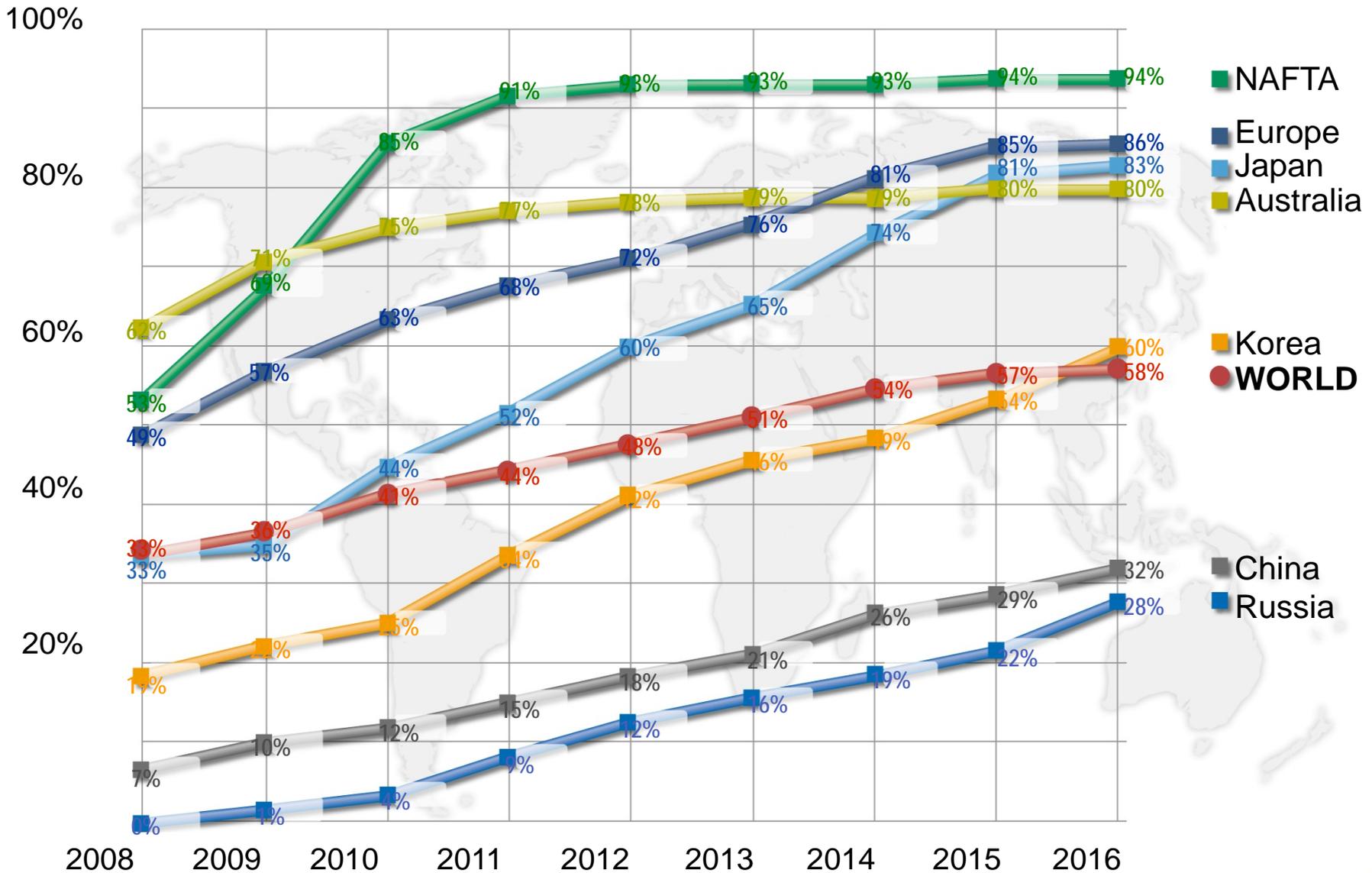
It will avoid up to 10,000 deaths annually in the USA and at least 4,000 in the EU.

ESC is mandatory in all new cars in Australia, Europe, Japan and the USA (since 2012). In 2008 a UN global technical regulation for ESC was adopted.



**CHOOSE
ESC!**

ESC Global Installation Rates to 2016



Motorcycle ABS – the Two Wheel Priority

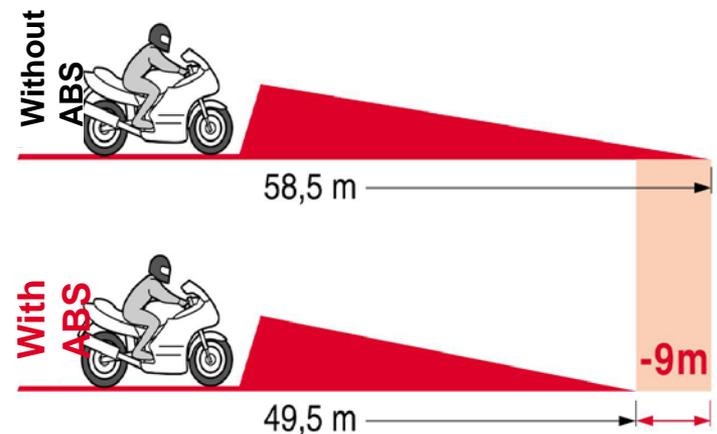
Anti Lock Brakes in Motorcycles is a global priority for powered two wheelers.

Studies of fatal crashes, insurance claims and test track performance all confirm the importance of antilock brakes.

The rate of fatal crashes is 37 per cent lower for motorcycles equipped with optional ABS than for those same models without ABS (IIHS 2011).

Collision insurance claims for motorcycles with ABS are filed 23 per cent less frequently than for motorcycles without it (HLDI 2012).

In the EU from 2016 ABS will be mandatory for new models above 125 cc, and from 2017 for all motorcycles in production.



Decade Plan for Safer Vehicles – Activity 5

Encourage use of fiscal and other incentives for motor vehicles that provide high levels of road user protection and discourage export of new and used cars that have reduced safety standards.

Demand for safer vehicles can grow quickly if encouraged by incentives.

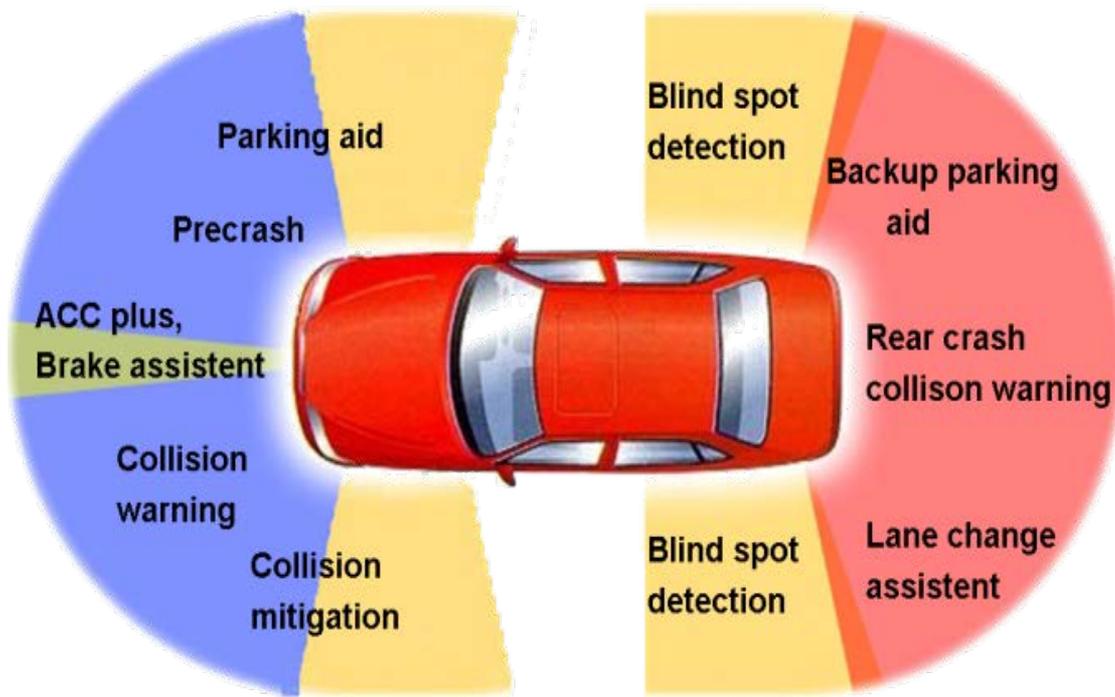
Incentives can include reduced sales tax or registration charges for cars that meet chosen technology requirements or standards.

The insurance industry can also take a lead in offering premium reductions for safer vehicles.



Decade Plan for Safer Vehicles – Activity 6

Sustain investment in research and development of safety technologies that will improve vehicle safety and reduce risks to vulnerable road users.



New Consumer Tests for Crash Avoidance

Real world claims data suggest that Autonomous Emergency Braking Systems (AEB) can reduce rear-end crashes by one quarter or more and will lead to a significant reduction of injuries.

New tests for AEB have been launched by IIHS and Euro NCAP. The tests focus on similar crash scenarios, but use different procedures.

IIHS tests an approach at 12 mph and 25 mph towards a stationary object.

Euro NCAP differentiates between City and Interurban speed ranges of up to max. 80 kph. Euro NCAP uses both a stationary and moving objects for the tests.



For more information see: <http://www.euroncap.com/testsexplained/aeb.aspx>

Decade Plan for Safer Vehicles – Activity 7

Encourage managers of governments and private sector fleets to purchase and maintain vehicles that offer advanced safety technologies and high levels of occupant protection.

Public and private fleets dominate new car sales. Fleet managers choices will raise demand for safer motor vehicles.

For example the mining company BHP Billiton and the governments of Australian and Sweden now only buy Five Star NCAP rated vehicles.

The new ISO standard for *Road Traffic Safety Management Systems* (ISO 39001) will also encourage improved fleet safety.

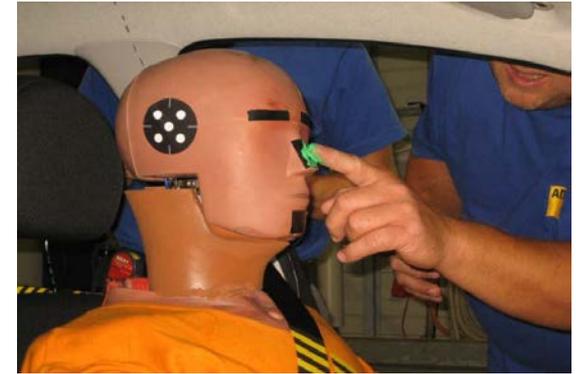


Global NCAP Recommendations

Global NCAP recommends choosing 'Five Star' cars rated by NCAPs where ever they are available.

Global NCAP also recommends that consumers buy cars that pass the most important standards of the UN World Forum for Harmonisation of Vehicle Regulations. These include:

- Seat belt anchorages - Reg. 14
- Safety belts and restraint systems - Reg. 16
- Occupant protection in frontal collision - Reg. 94
- Occupant protection in lateral collision - Reg. 95
- Electronic stability control - GTR 8
- Pedestrian protection - GTR 9



Global NCAP also recommends that the car manufacturers make a commitment to the UN Decade of Action by adopting a global voluntary agreement to apply by 2015 to all vehicles in production Regs.14, 16, 94, & 95, and GTR 8 & 9 at the latest by 2020.

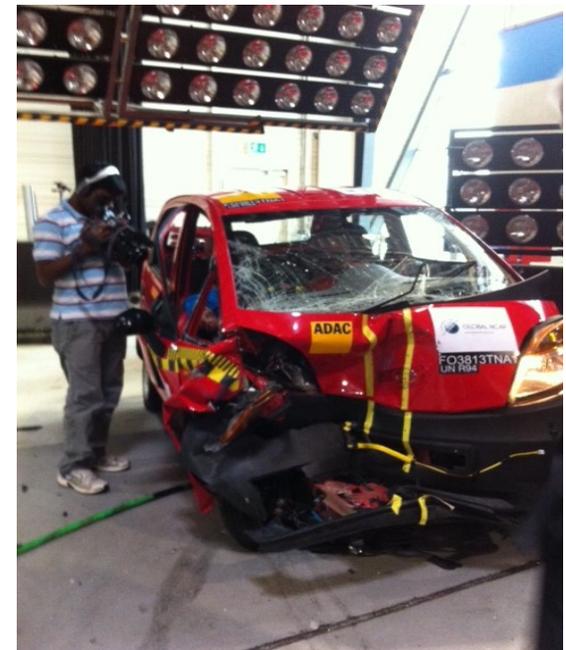
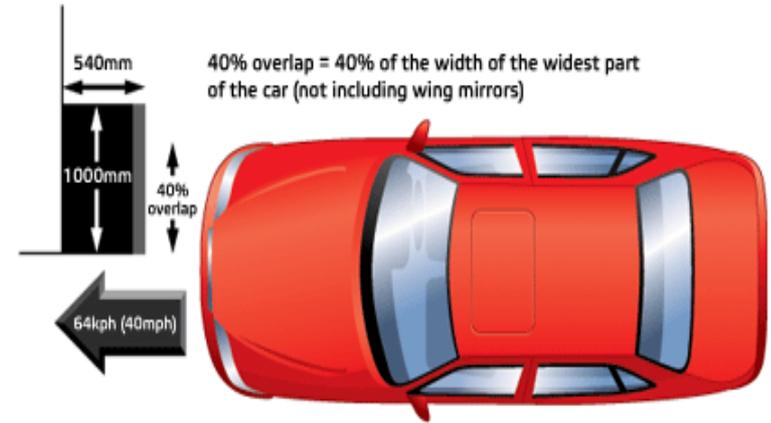
Indian Vehicle Safety Research Project

Our Indian Vehicle Safety Research Project is testing five popular models on the Indian market. Models tested are:

- Ford Figo
- Tata Nano
- Maruti Alto
- Volkswagen Polo
- Hyundai i10

Each model will be tested to the UN Reg 94 frontal impact standard at 56 kph and also the typical NCAP test speed of 64 kph.

The results will be launched on 31st January in New Delhi at the 2014 Emerging Market Automobile Safety Conference organised by IRTE, Global NCAP, with support from World Bank Global Road Safety Facility, UL and Denso.



Our 2020 Vision...

In 2011 from a total of 60 million new cars more than 20 million fail to meet UN crash test standards, have no air bags, no anti-lock brakes, and no electronic stability control.



By 2020 all new cars should meet UN crash test standards with air bags, ABS and ESC fitted as standard. This needs governments to regulate and car makers to supply all markets with the same quality vehicles.

...Only Five Star Cars by 2020

Thank You!

