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World Forum for the Harmonization of Vehicle Regulations (WP.29)

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Introduction

- A brief history of the United States New Car Assessment Program (NCAP)
- The World Forum for the Harmonization of Vehicle Regulations (WP.29)
- The relationship between NCAP and the World Forum

United States 5-Star Safety Ratings Program

- Under the U.S. NCAP program, the National Highway Traffic Safety Administration has been providing information on the safety performance of vehicles for over 30 years
- The program provides consumers with information about crash protection and rollover safety of vehicles beyond Federal standards
- The program has helped consumers make informed decisions when purchasing or leasing a new or used vehicle
- The rating system ranges from 1 to 5 stars, with 1 star being the lowest and 5 stars the highest

Measurements of Program Success

- The success of the program can be measured in how the market has responded
- Consumers have generated demand for safety features and performance that go beyond Federal requirements
- Manufacturers now routinely use the star ratings provided by the program in their advertising
- More and more vehicles have been achieving 4- and 5-star ratings at a faster pace

Recent Program Enhancements

- In July 2008, NHTSA published a notice announcing major changes to the program
- In October 2010, NHTSA implemented the enhanced program beginning with model year 2011

Key Changes in the Program

- The enhanced program:
 - Bases the ratings on protection for a wider range of occupants (use of 50th percentile male and 5th percentile female test dummies)
 - Uses improved crash test dummies
 - Adds a new pole test for side crashes
 - Combines all the ratings into an overall vehicle score
 - Identifies those vehicles that have advanced technologies that help prevent crashes in the first place
 - Electronic stability control (ESC)
 - Forward collision warning (FCW)
 - Lane departure warning (LDW)

Key Safety Milestones

- 1978 – NHTSA began testing vehicles for **frontal impact** protection
- 1993 – NHTSA began using the **5-Star Safety Ratings system** to assign safety scores based on the level of occupant protection a vehicle provides
- 1996 – NHTSA began testing and rating vehicles for **side impact protection**
- 2000 – NHTSA began testing and rating vehicles for **rollover resistance** based on a static measurement of a vehicle's track width and the height of its center of gravity
- 2003 – NHTSA **updated the rollover program** to include a dynamic test that measures untripped rollovers
- 2004 – NHTSA launched a new website, www.SaferCar.gov, to provide consumers with vehicle safety information

Key Safety Milestones

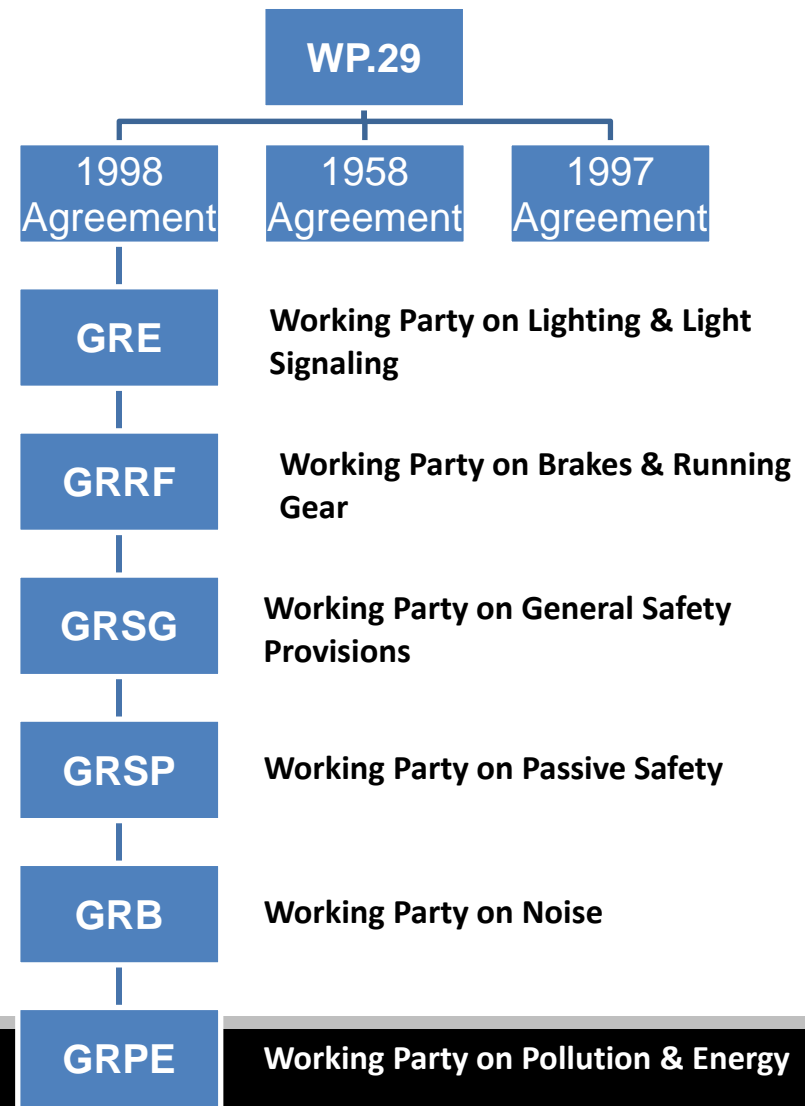
- 2006 – NHTSA began requiring vehicle manufacturers to include **safety ratings information on the vehicle window sticker**, also known as the Monroney label
- 2008 – NHTSA **announced the most significant changes in the history of the NCAP** program, including the addition of a new side pole test, improved crash test dummies, more stringent ratings criteria, and the identification of vehicles equipped with advanced crash avoidance technologies that meet NHTSA's performance criteria
- 2010 – **NHTSA implemented the enhanced NCAP program beginning with model year 2011** and provided the safety ratings of tested vehicles and vehicles equipped with advanced crash avoidance technologies on www.SaferCar.gov

Global Harmonization: WP.29

- The World Forum for Harmonization of Vehicle Regulations works to develop harmonized UN - Global Technical Regulations (GTR) and UN - Regulations for vehicle safety, theft prevention and environmental friendliness
- WP.29 stakeholders and participants include:
 - Over 50 governments
 - International trade associations of vehicle manufacturers and component suppliers
 - International associations of consumer advocacy groups
 - Standard setting organizations such ISO and SAE

Global Harmonization: WP.29

- NHTSA conducts its harmonization efforts through WP.29's 1998 Global Agreement, which develops GTRs
- Signatories to the 1998 Agreement includes most of the members of the 1958 Agreement as well as other countries such as the PRC (China), India, and the U.S.
- The technical work to develop GTRs is conducted in any of WP.29's six subsidiary Working Parties



Harmonization: Guiding Principles

- International development of Global Technical Regulations under the 1998 Agreement are based on 3 governing principles:
- **Data & Science**
 - Rigorous research on safety issues and countermeasures enables
 - The development of objective compliance tests and methods
 - Sound regulatory impact assessments (cost-benefit analyses)
- **Performance**
 - GTRs are performance based to the extent possible, which enables and encourages vehicle safety innovations
- **Transparency**
 - Information on proposed regulations, drafts, and meeting reports are available publically
 - Public comment is sought throughout the GTR development process

1998 Global Agreement

- The 1998 Global Agreement's Program of Work is based on proposals that may be made by any of the contracting parties
 - To develop new Global Technical Regulations
 - To amend existing GTRs
 - To establish an ongoing exchange of information in a particular area
- The current Program of Work includes:
 - Developing appropriate regulations for the emergence of electric vehicles
 - Hydrogen powered vehicles
 - Side and rear impact crash test dummies
 - Light vehicle tires
 - Enforcement working group (exchange of information item)

World NCAP Programs, UN-GTRs and Regulations

- Many NCAP programs from around the world base their test procedures on existing UN - GTRs or UN - Regulations developed under WP.29
- The United States NCAP bases many of its test procedures on the Federal Motor Vehicle Safety Standards (FMVSS)

World NCAP Programs, UN-GTRs and Regulations

- As an example, the United States NCAP test procedures are based primarily on two of the Federal Motor Vehicle Safety Standards:
 - FMVSS No. 208 - Occupant Crash Protection
 - FMVSS No. 214 - Side Impact Protection

Thank You

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