



UNITED NATIONS

Increasing vehicles' safety and environmental performance

Juan Ramos Garcia, Secretary

World Forum for the Harmonization of Vehicle Regulations (WP.29)
United Nations Economic Commission for Europe (UNECE)

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Need for a worldwide regulatory framework

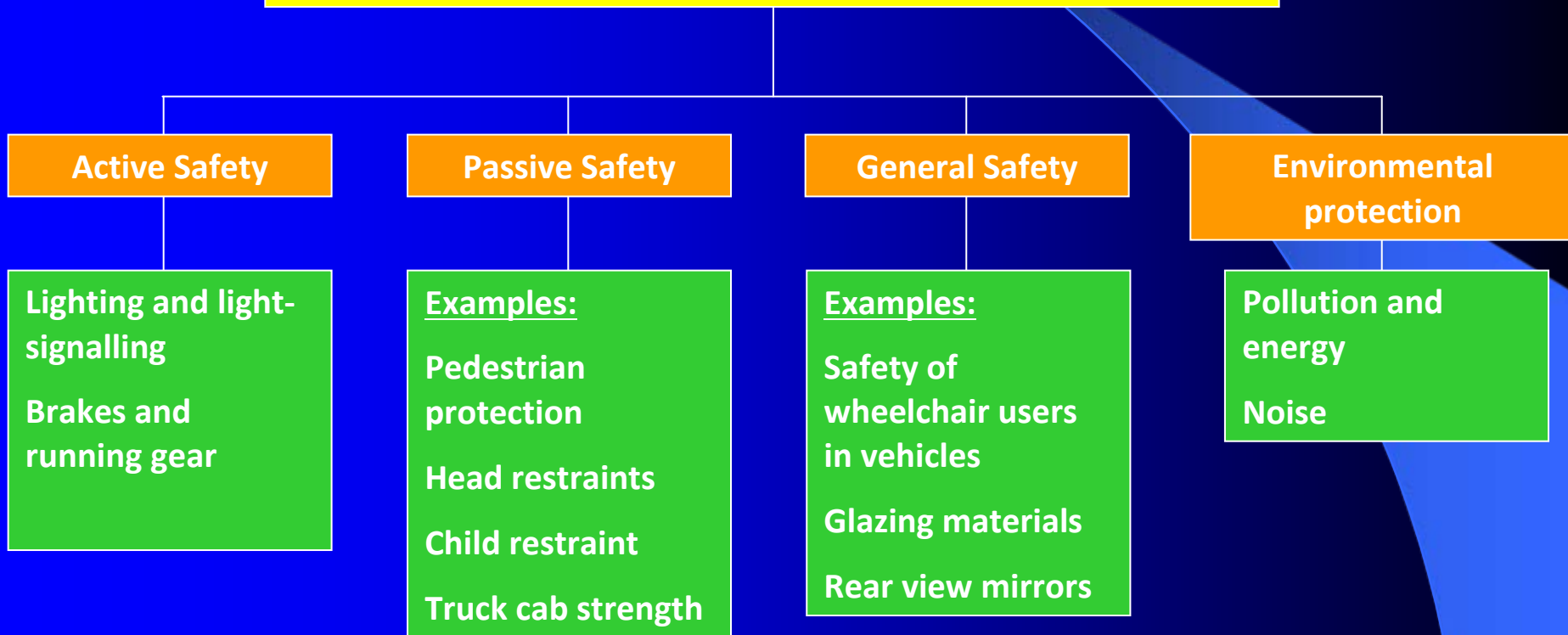
- Motor industry is a worldwide industry
- An essential economic sector (€ 2 trillion, 9 million employees, 66 million vehicles)
- But, need to mitigate negative effects (accidents, pollutants, climate change)
- Regulatory framework: Nationally or internationally?
- Creation of the UNECE World Forum for Harmonization of Vehicle Regulations (WP.29) in 1952

UNECE World Forum administers UN Agreements

- The 1958 Agreement on vehicle regulations (1959): **126 Regulations** constantly adapted to technical progress
- The 1997 Agreement on periodical technical inspections (2001): 1 Rule limiting vehicle pollutants
- The 1998 Global (Parallel) Agreement on global technical regulations (2000): **9 regulations**
- Since 2007, WP.29 considering fuel quality standards

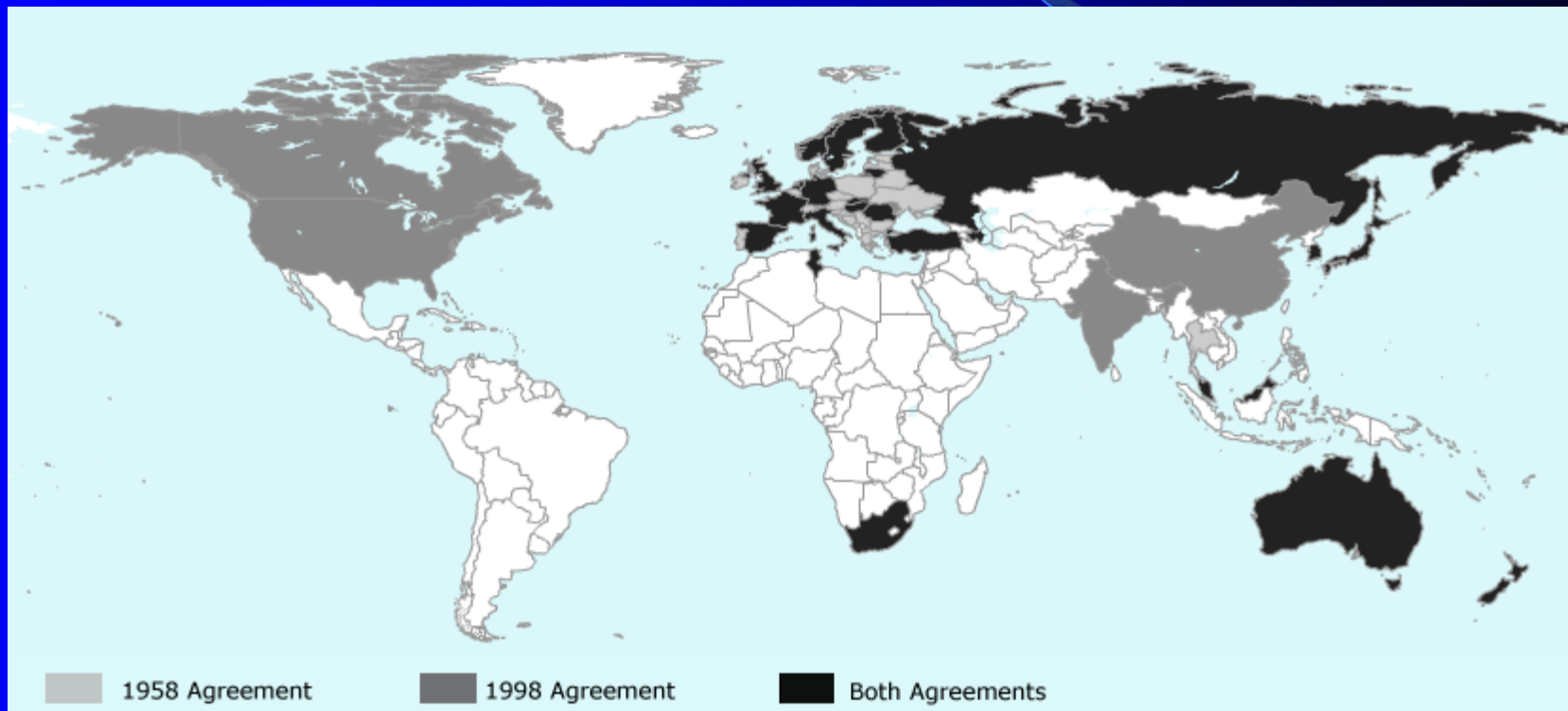
World Forum regulates 4 main areas

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



+ 30 non-permanent technical groups

Parties to 1958 and 1998 Agreements



Benefits of the World Forum

- Increase Vehicle Safety and Environmental performance: **parties to 58 or 98 Agreement > 80% world production**
- Countries and Regional organizations represented (50)
- Brings together governments, manufacturers and technical experts
- **EU is replacing (2003) Directives with reference to UNECE regulations** and applies more than 100 Regulations
- Tokyo Ministerial Conference (G20 +) Environment and Energy in Transport and ITF encouraged countries to lower carbon use and pollution in transport through the World Forum regulations
- Harmonised regulations reduce trade barriers

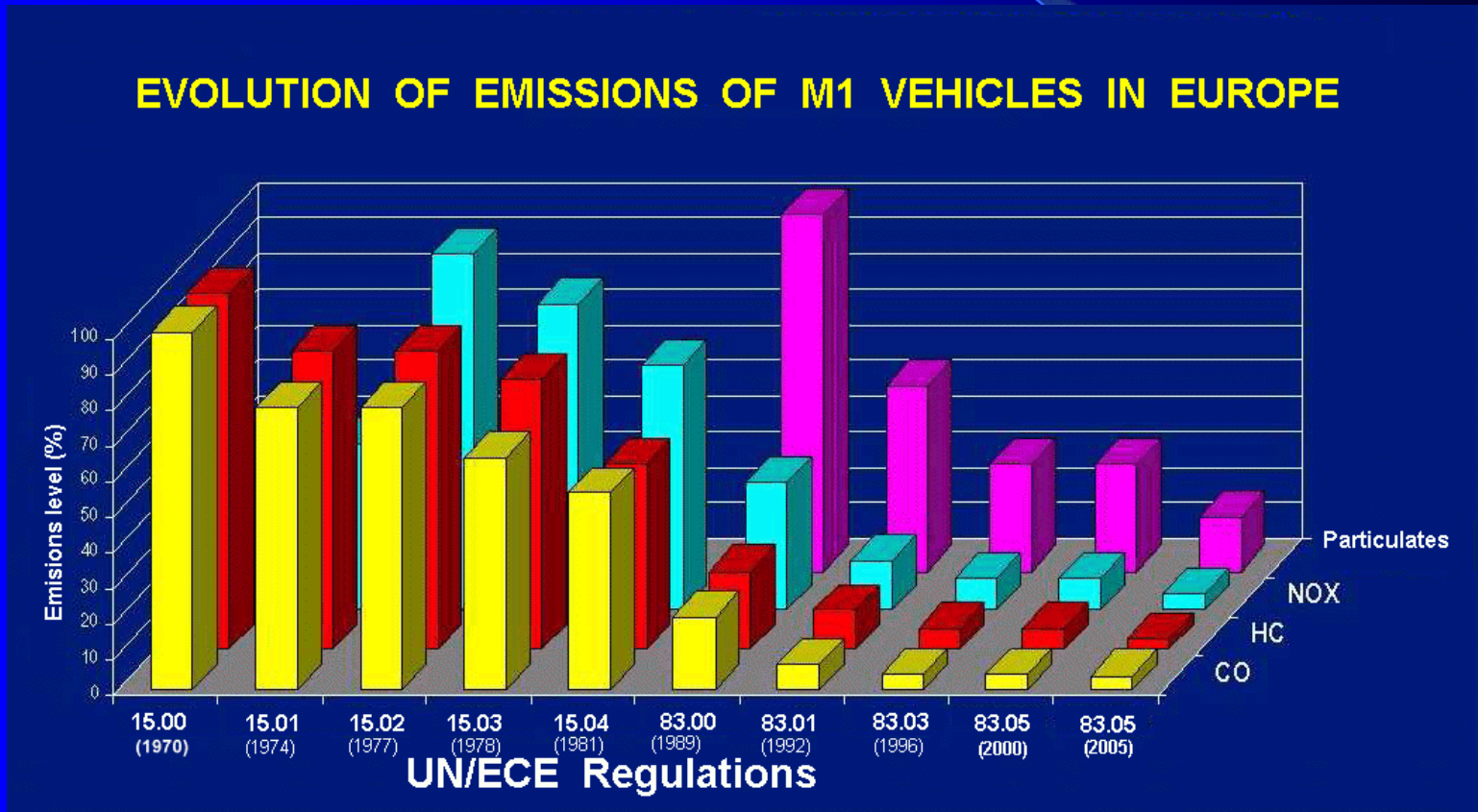
Examples of safety requirements

- Electronic vehicle stability control systems
- Adaptive front lighting systems
- Universal child restraint systems
- Pedestrian safety
- Reinforcement of coaches superstructure
- Under development
 - ✓ Advance emergency braking systems
 - ✓ Lane keeping assistance

Achievements in environmental protection

- Reduction > 85% of classic pollutants (CO, NO_x, HC) and particulates
- Electric and hybrid vehicles, including Plug-in
- LPG, CNG, biofuels
- World test cycles for emission measurements
- Promotion of environmentally friendly vehicles

Vehicle emissions regulations (cars)



World Forum Strategy CO₂ reduction

From fossil fuels to H₂ and electricity

- **Short term (2015)**
 - ✓ Energy efficiency by engine technology, TPMS, rolling resistance
 - ✓ Use of sustainable bio-fuels
- **Mid term (2015-2025)**
 - ✓ Plug-in hybrid vehicles in the market
- **Long term (2025-2040)**
 - ✓ Electric and Hydrogen vehicles in the market

Sustainable and cost-effective generation of electricity and production of H₂

Need for sustained government commitment

- **Continuous and proactive participation of Governments:**
 - In WP.29 activities
 - In the development of harmonized vehicle regulations
- **Governments to accelerate adoption of vehicle environmental and safety measures based on WP.29 regulations**
- **Facilitating worldwide dissemination of environmentally friendly vehicles**

Conclusion

- **Tangible benefits for participating countries, manufacturers and consumers**
- **Need for further progress on safety and environmental protection through energy efficiency, emissions reduction and alternative propulsion systems**
- **Geographical expansion to maximise benefits**



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Thank you for your attention!

www.unece.org/trans/main/welcwp29.htm