



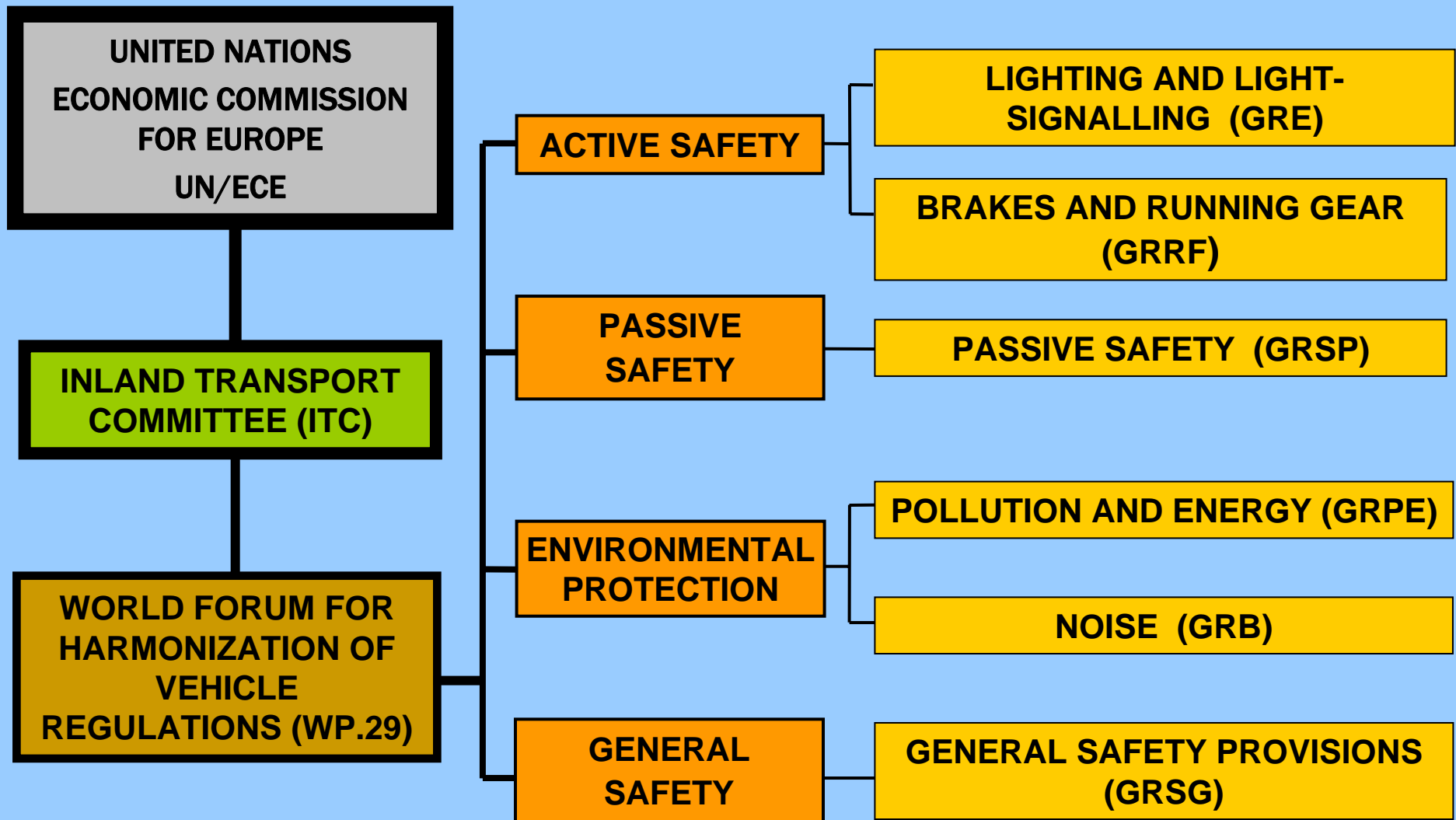
WP.29 Activities on vehicle efficiency and its link with energy policy

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Structure of the World Forum WP.29





Environmental Protection/Energy efficiency: Achievements

GRPE Activities on pollution and energy:

- LPG and CNG vehicles (1987 and 2000)
- Electrical Vehicles (EV): 1996
- Hybrid/Electric Vehicles (HEV): 2004 and Plug-in Hybrid/Electric Vehicles (PHEV): 2008
- Measurement procedure for CO2 emissions (Fuel consumption): 1997
- Bio-Fuels
- Environmentally Friendly Vehicles (EFV) – Feasibility (2009)

GRB (mainly noise but also energy efficiency):

Noise level of for motor cycles and automobiles : 1980 &1982

- Tyre rolling noise and wet grip adhesion: 2007

GRRF (mainly braking and tyre issues but also energy efficiency):

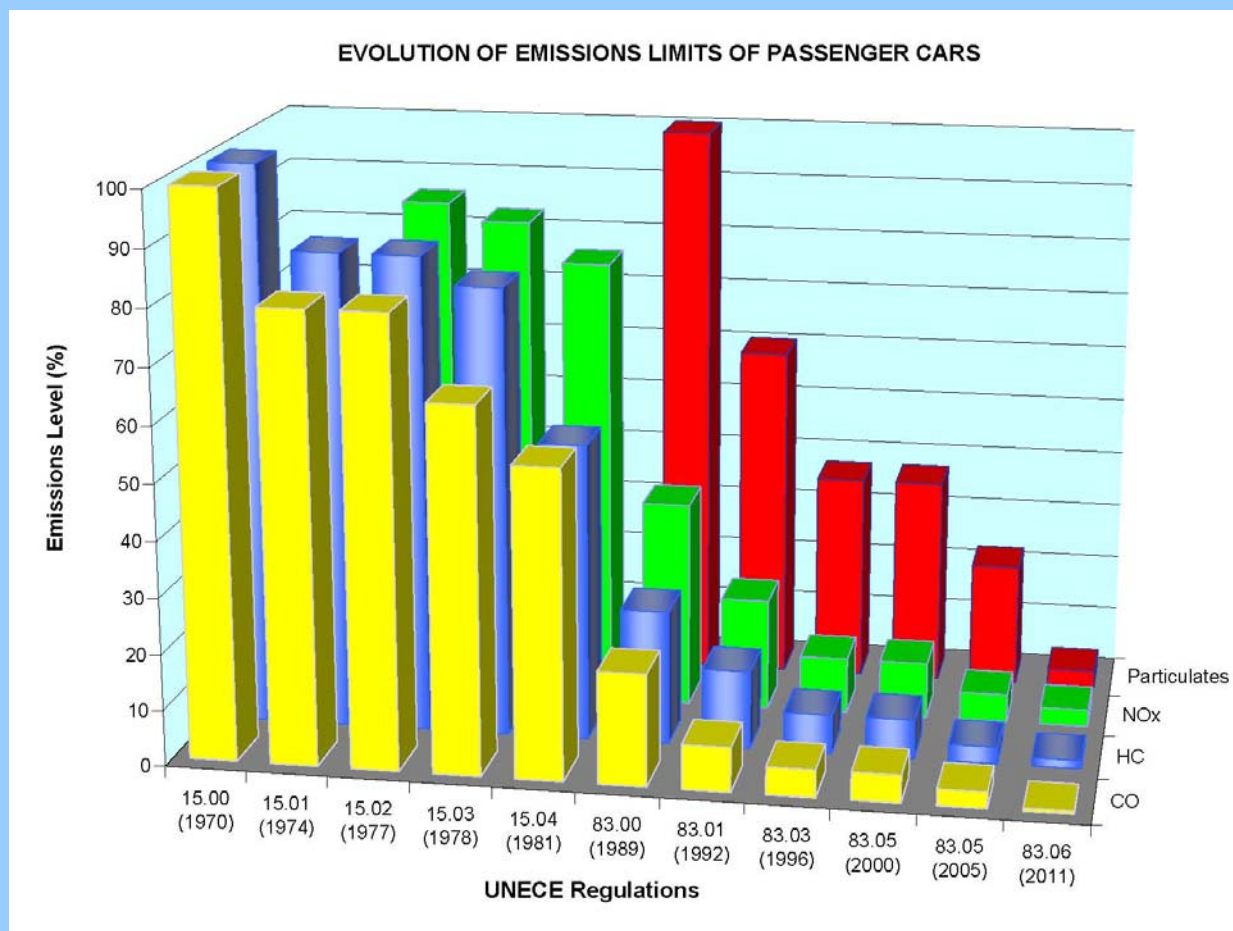
- ABS: 1990, ESC: 2008
- Regenerative braking systems: 2008

GRE Activities on lighting and light-signalling:

- LED headlamps: 2008



Gaseous pollutants: Market fuel quality





New challenges: fuel quality and CO₂ reduction

Fuel quality has a major impact on vehicle pollutant emissions

→ **Need for market fuel quality standards**

Possible scenarios of development of the car sector to tackle climate change :

in 2015: 30% increase of the energy efficiency of all new vehicles with the current combustion engine technology

in 2020: full introduction into the global market of new environmentally friendly vehicles (e.g. plug-in hybrid vehicles)

in 2040: full introduction into the global market of electric vehicles as well as hydrogen and fuel-cell vehicles

→ **It is necessary that the energy production is also CO₂ friendly**



Environmental Protection/Energy efficiency: Future work

GRPE

- Market Fuel Quality (FQ): 2010
- Hydrogen & Fuel Cell vehicles (HFCV) - Environment: 2010
- Worldwide Harmonized Light Vehicle Test Procedures (WLTP): 2014

GRSP:

- Electrical safety for fuel cell vehicles and new electric vehicles : 2010

GRB

- Tyres with low Rolling Resistance : 2010

GRRF

- Tyre Pressure Monitoring Systems (TPMS): 2010

GRSG

- Plastic glazing: 2010

WP.29 informal group on:

- Intelligent Transport Systems (ITS)



Thank you for your attention

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