WP.29 Activities on Climate Change Mitigation and its Round Table on Global Warming and Transport

Presentation at the 22nd session of the Working Party on Transport Trends and Economics (WP.5)

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Structure of the World Forum WP.29

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE UN/ECE

INLAND TRANSPORT COMMITTEE (ITC)

WORLD FORUM FOR HARMONIZATION OF VEHICLE REGULATIONS (WP.29)

ACTIVE SAFETY

LIGHTING AND LIGHT-SIGNALLING (GRE)

BRAKES AND RUNNING GEAR (GRRF)

PASSIVE SAFETY (GRSP)

ENVIRONMENTAL PROTECTION

POLLUTION AND ENERGY (GRPE)

NOISE (GRB)

GENERAL SAFETY

GENERAL SAFETY PROVISIONS (GRSG)
Active Safety (crash-avoidance)

GRRF Activities on brakes and running gear:
- Anti-lock braking systems (ABS): 1990
- Regenerative braking systems: 2008
- Electronic Stability Control (ESC): 2008

GRE Activities on lighting and light-signalling:
- Conspicuity/Contour markings: 2006
- Dedicated Daytime Running Lamps (DRL): 2007
- LED headlamps: 2008

WP.29 informal group on:
- Intelligent Transport Systems (ITS)
Passive and General Safety

GRSP Activities on passive safety (crash-worthiness):
- Safety belts: 1970
- Protective helmets: 1972
- Frontal and lateral crash tests: 1995
- Pedestrian safety: 2008
- Electric safety: (2010)
- Updated frontal crash barrier: (2010)

GRSG Activities on general safety provisions:
- Indirect vision systems (mirrors & camera monitoring): 1981/2005
- Safety glazing materials: 1981/2008
- Superstructure of buses and coaches: 1986/(2010)
- Vehicle alarm systems: 1997
- Burning behaviour: 2005
Environmental Protection

**GRPE Activities on pollution and energy:**
- Liquefied Petroleum Gas (LPG): 1987
- Electrical Vehicles (EV): 1996
- Measurement procedure for CO2 emissions (Fuel consumption): 1997
- Compressed Natural Gas (CNG): 2000
- Hybrid/Electric Vehicles (HEV): 2004
- Environmentally Friendly Vehicles (EFV) – Feasibility (2009)

**GRB Activities on noise:**
- Tyre rolling noise and wet grip adhesion: 2007
- Tyres with low Rolling Resistance: (2010)
Gaseous pollutants and particles

EVOlUTION OF EMISSIONS LIMITS OF PASSENGER CARS

UNECE Regulations

- Particulates
- NOx
- HC
- CO

UNECE Transport Division 6
The World Forum and a possible strategy for climate change mitigation

WP.29 noted, at its November 2008 session, that a possible strategy for climate change mitigation could be:

- 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

In March 2009, WP.29 decided to hold during its June 2010 session a “Round table on Global Warming and Transport”:

- to promote and secure the implementation of its work programme and strategy to mitigate climate change
- brainstorming session in November 2009
UNDA Project on Global Warming and Transport

Objective:
To develop an information and analysis tool based on a uniform methodology for the evaluation of CO$_2$ emissions in the transport sector in order to enable all UN countries to optimize the use of energy sources in the transport sector, taking into consideration: road vehicle fleets, types of propulsion systems, transport infrastructure, Intelligent Transport Systems, sustainable energy sources, intermodal transport on railways and inland waterways.

Expected Achievement:
A powerful analysis tool to develop future transport strategies and to support policy decisions by the countries to receive feedback on the impact of their policy scenarios on the economy.