



Transport Division of UNECE

Vehicle Regulations and Transport Innovations Section

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

- Structure of WP.29
- Legal instruments
- Outlook

By Romain HUBERT (TD-VRTIS)

at the Seminar on the Main UN Road Transport Agreements:

"Progress in the EuroMed region and the way forward"

Geneva, 9 September 2014





Historical background of WP.29

- 1952: Establishment of WP.29
- 1958: '58 Agreement
- 1997: '97 Agreement
- 1998: '98 Agreement
- 2000: World Forum





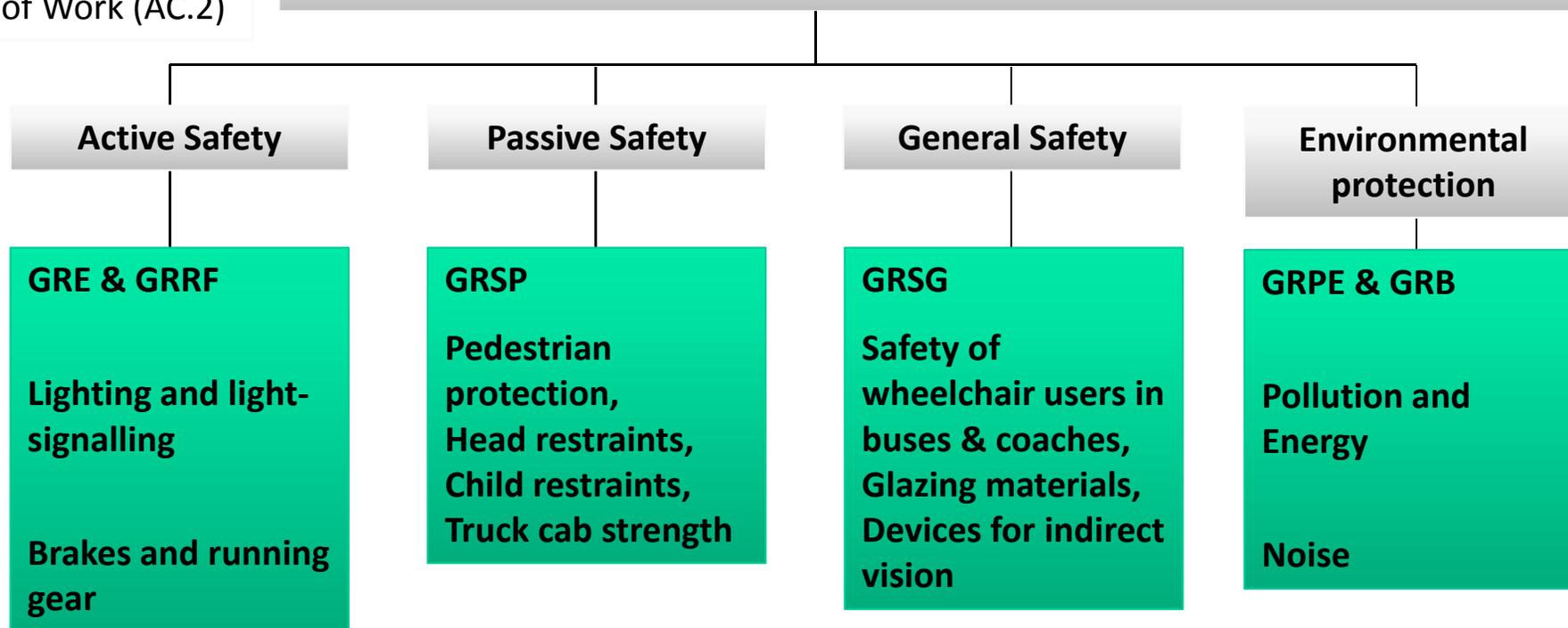
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The WP.29 structure

Committee for the 1958 Agreement (AC.1)
Committee for the 1998 Agreement (AC.3)
Committee for the 1997 Agreement (AC.4)

Committee for
Coordination
of Work (AC.2)

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



More than 45 non-permanent technical expert groups





Why a worldwide regulatory framework for vehicles is needed?

- Regulatory framework: Nationally or internationally?
→ WP.29 established in 1952 (World Forum since 2000)
- The automotive industry became a global industry
- Main contributor to economical growth
- Mitigate negative effects (accidents, pollutants, climate change)



Note: The development of worldwide harmonized regulations results:

- in safer and cleaner vehicles and
- in the reduction of technical barriers to trade and of costs for consumers



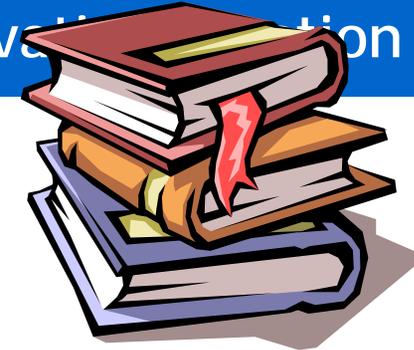


WP.29 is worldwide, unique and transparent

- Agreements open to all member states (MS) of the UN
- Participation in the sessions open to MS, Governmental Organizations (GOs) and NGOs, but:

Decisions are taken by Governments (of CPs)





WP.29 administers 3 Agreements

'58 Agreement

Uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for *reciprocal recognition* of approvals granted on the basis of these prescriptions
(51 Contracting Parties, 134 UN Regulations)

'98 Agreement

Establishing of Global Technical Regulations (GTRs) for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicle
(33 Contracting Parties, 14 UN GTRs)

'97 Agreement

Uniform conditions for periodical technical inspections of wheeled vehicles and the reciprocal recognition of such inspections
(12 Contracting Parties, 17 signatories pending ratification, 2 UN Rules)





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1958 Agreement vs. 1998 Agreement:

| | International standards (e.g. ISO) | UN GTRs ('98 Agreement) | UN Regulations ('58 Agreement) | National / regional legislations (e.g. EU Directives) |
|---------------------------|------------------------------------|-------------------------|---|--|
| Test method | technical provisions | technical provisions | technical provisions | transposition procedure (reproduce in total or refer to the provisions of UN Regulation, UN GTRs or international standards) |
| Performance requirements | - | limit values | limit values | |
| Administrative procedures | - | - | certification and COP procedures + mutual recognition | |
| Transposition | - | Changes are admitted | No changes permitted | - |
| Application | optional | (optional) | (optional) | mandatory |



The global outreach of the 1958 Agreement:

Contracting Parties: 51 countries (incl. European Union)

(Germany, France, Italy, Netherlands, Sweden, Belgium, Hungary, Czech Republic, Spain, Serbia and Montenegro, United Kingdom, Austria Luxembourg, Switzerland, Norway, Finland, Denmark, Romania, Poland Portugal, Russian Federation, Greece, Ireland, Croatia, Slovenia, Slovakia, Belarus, Estonia, Bosnia and Herzegovina, Latvia, Bulgaria, Lithuania, [Turkey](#), Azerbaijan, Macedonia, EU, Japan, Australia, Ukraine, South Africa, Cyprus, Malta, Republic of Korea, Malaysia, Thailand, [Montenegro](#), [Tunisia](#), [Albania](#) and [Egypt](#))

Other countries like Indonesia, India, Philippines, Argentina, Colombia, Brazil, Chile, ... have either initiated the accession to the Agreement or are considering their possible accession to it.

Some countries, like Argentina, Philippines ... use as national legislation the Regulations annexed to the 1958 Agreement.

The EU has decided to replace a considerable amount of its vehicle directives by only a reference to the corresponding UN Regulations (CARS 21). The Russian Federation has taken a similar action.

Other countries e.g. South-Africa reproduces the UN Regulations in their national legislation.



Revision 3 to the 1958 Agreement: Objectives

- A CP applying a UN Regulation may issue type-approvals pursuant to **earlier versions of the UN Regulation** (i.e. pursuant to preceding series of amendments or the original version of the UN Regulation). However, other CPs applying the UN Regulation are be obliged to accept such type-approvals (allow emerging economies to join).
- All CPs applying a UN Regulation shall **mutually recognize type-approvals granted according to the latest version** of the UN Regulation (keep principle of mutual recognition).
- Insertion of the new scheme for the **International Whole Vehicle Type Approval** (IWVTA) into draft UN Regulation No. 0.
- Establishing of a UNECE **Database for the Exchange of Type Approval documentation** (DETA) between all CPs.
- Modified **voting procedure and conditions** (delegation of voting right to another CP; consideration of 4/5 majority instead of 2/3 majority).

more detailed info: www.unece.org/fileadmin/DAM/trans/doc/2014/itc/ECE-TRANS-2014-12e.pdf





Next steps on 1958 Agreement:

WP.29 expect to resume consideration in November 2014:

- Draft Revision 3 to the 1958 Agreement (ECE/TRANS/WP.29/2014/53)
- Draft UN Regulation No. 0 (informal document)

Remaining open issues to be clarified with OLA

Next IWVTA SG meetings in Paris on 23-24 September 2014

Adoption by WP.29/AC.1 of Rev.3 expected by March 2015

Revision 3 expected to enter into force by March 2016





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Future WP.29 activities on the 1998 and 1997 Agreements:

WP.29 may wish to consider:

- the need for a revision of the 1998 Agreement
- a solution enabling the ratification of the 17 signatories to the 1997 Agreement



The Agreements

- Established by consensus
- The Depositary is the S-G
- Follow well-established UN legal procedures
- Open to all UN Member States and REIO
- No accession fee
- Amended as the needs arise
- Many non-ECE States are already Parties
- To become a Party, deposit an instrument with the S-G





How to become CP to an Agreement

Requirements for a valid instrument of accession:

- Identify the Agreement
- Declaration of undertaking. Expression of intent of the Government to be bound by the Agreement and to undertake faithfully to observe and implement its provisions
- Issued and signed by:
Head of State or Government or the Minister of Foreign Affairs (MFA) or by a person exercising the power of one of these authorities *ad interim*.
- Dated
- Addressed to the UN Secretary General in New York





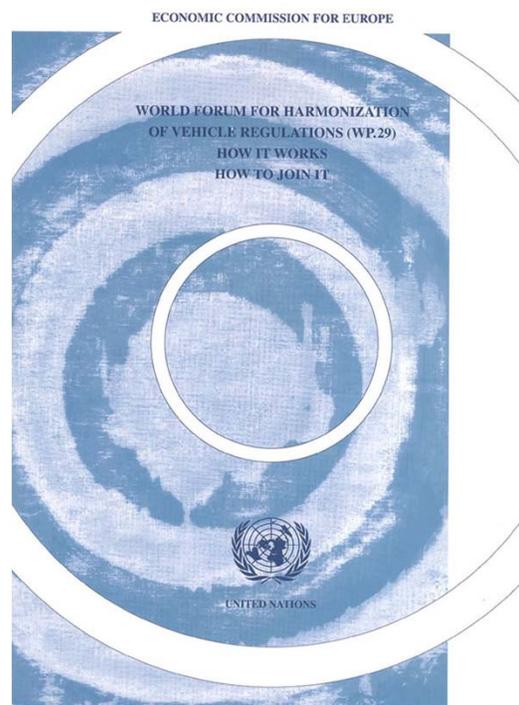
Model of an instrument of accession

- WHEREAS the [title of agreement] was concluded [adopted, etc.] at [place] on [date],
- NOW THEREFORE I, [name and title of the head of State or Government or MFA], declare that the Government of [name of State], having considered the above mentioned [agreement], accedes to the same and undertakes faithfully to perform and carry out the stipulations therein contained.
- IN WITNESS WHEREOF I have signed this instrument of accession at [place] on [date].



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WP.29 How It Works How to join it?



<http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29pub.html>

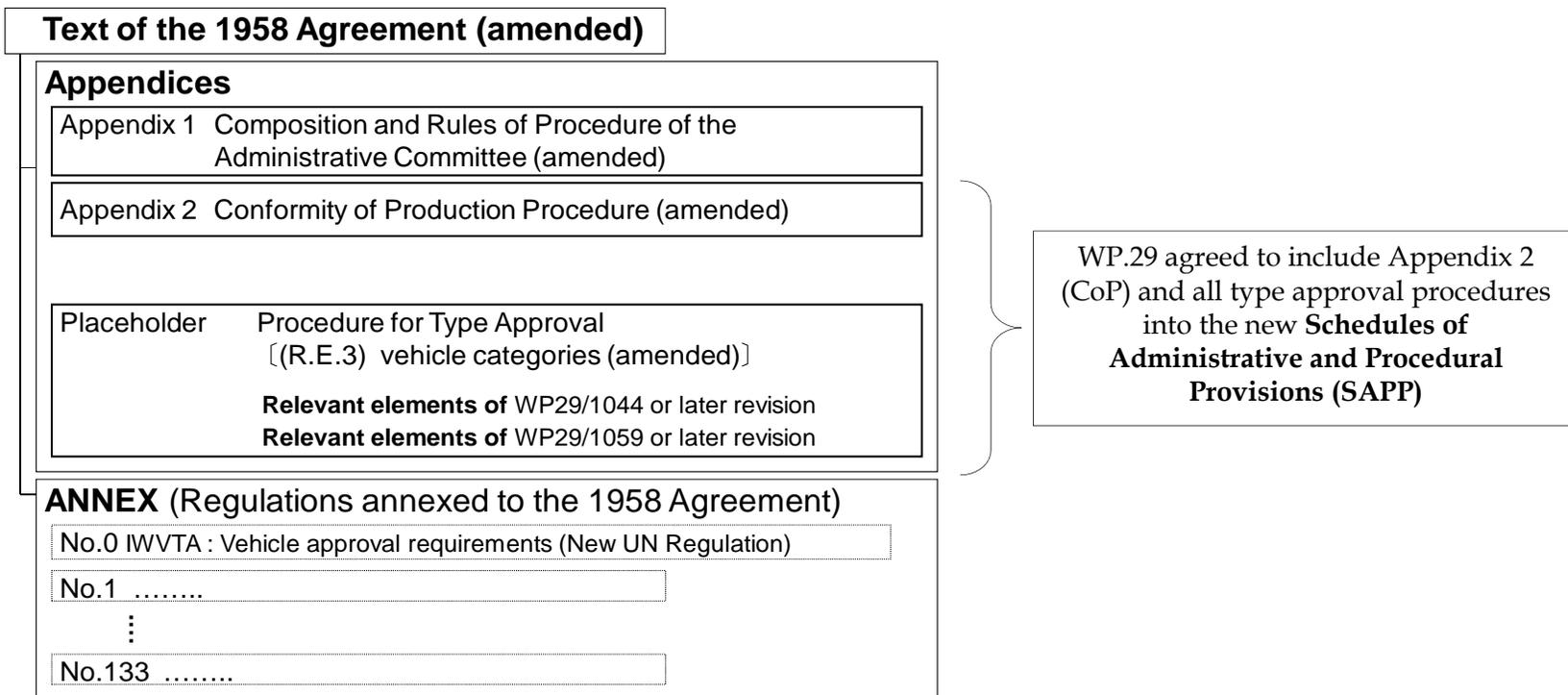
THANK YOU FOR YOUR ATTENTION
romain.hubert@unece.org

9 September 2014





Revision 3 to the 1958 Agreement: Principles



Draft Revision 3: www.unece.org/fileadmin/DAM/trans/doc/2014/wp29/ECE-TRANS-WP29-2014-053e.pdf





International Whole Vehicle Type Approval (IWVTA)

- Definition: “International whole vehicle type approval” means that all type approvals granted pursuant to applicable UN Regulations for the systems, components and parts of a vehicle are integrated into a single approval of the whole vehicle according to the administrative provisions of UN Regulation No. 0
- Scope: First step is the IWVTA of category M1 vehicles (passenger cars)
- Structure:
 - ❑ New UN Regulation No. 0 on IWVTA (listing all UN Regulations to which the type of vehicle has to comply with)
 - ❑ New “Schedules” under the 1958 Agreement (Annex with a list of administrative and technical procedures).

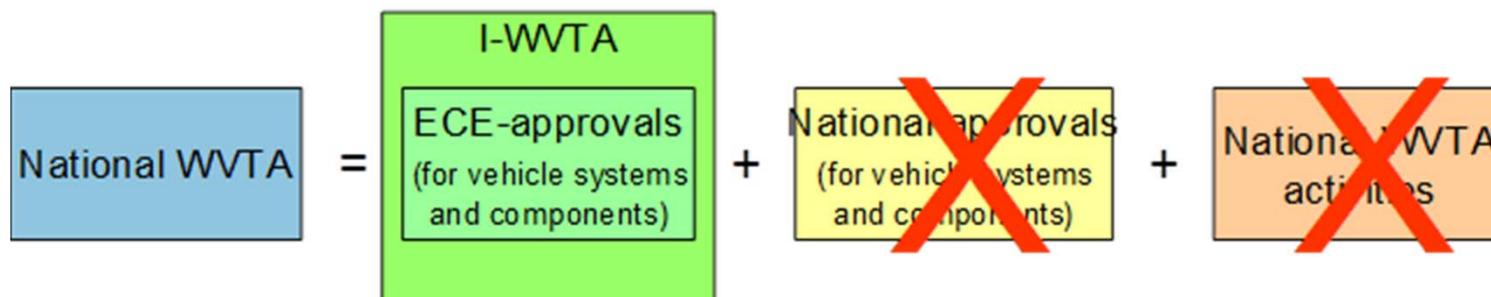
More detailed info: www.unece.org/fileadmin/DAM/trans/doc/2014/wp29/WP.29-162-10.pdf





Ultimate goal of the IWVTA

Complete mutual recognition of whole vehicle type approval, without any additional national requirements or approvals remaining:





New UN Regulation No. 0 annexed to the 1958 Agreement

Two-Step Approach:

- Review of the list of candidate UN Regulations applicable for IWVTA (valid, split, amend, develop)
- Former series of amendments including all its Supplements “frozen” in a version of a UN Regulation

UN Regulation No. 0 in progress by all Working Parties subsidiary to WP.29
(Annex with a list of UN Regulations applicable to IWVTA)

More info: www.unece.org/fileadmin/DAM/trans/doc/2014/wp29/WP29-162-11.pdf





Database for the Exchange of Type Approval documentation (DETA)

- WP.29 decision in June 2013 to establish DETA
- ETAES as a basis for DETA (Piloting out, hosting of DETA)
- Unique Identifier (instead of ECE marking)
- Draft amendments to the 1958 Agreement & UN Regulations
- Free access to all CPs to the 1958 Agreement

See interim report, including proposals for amendments to the 1958 Agreement:

www.unece.org/fileadmin/DAM/trans/doc/2013/wp29/WP29-159-21.pdf

www.unece.org/fileadmin/DAM/trans/doc/2014/wp29/WP.29-162-17e.pdf

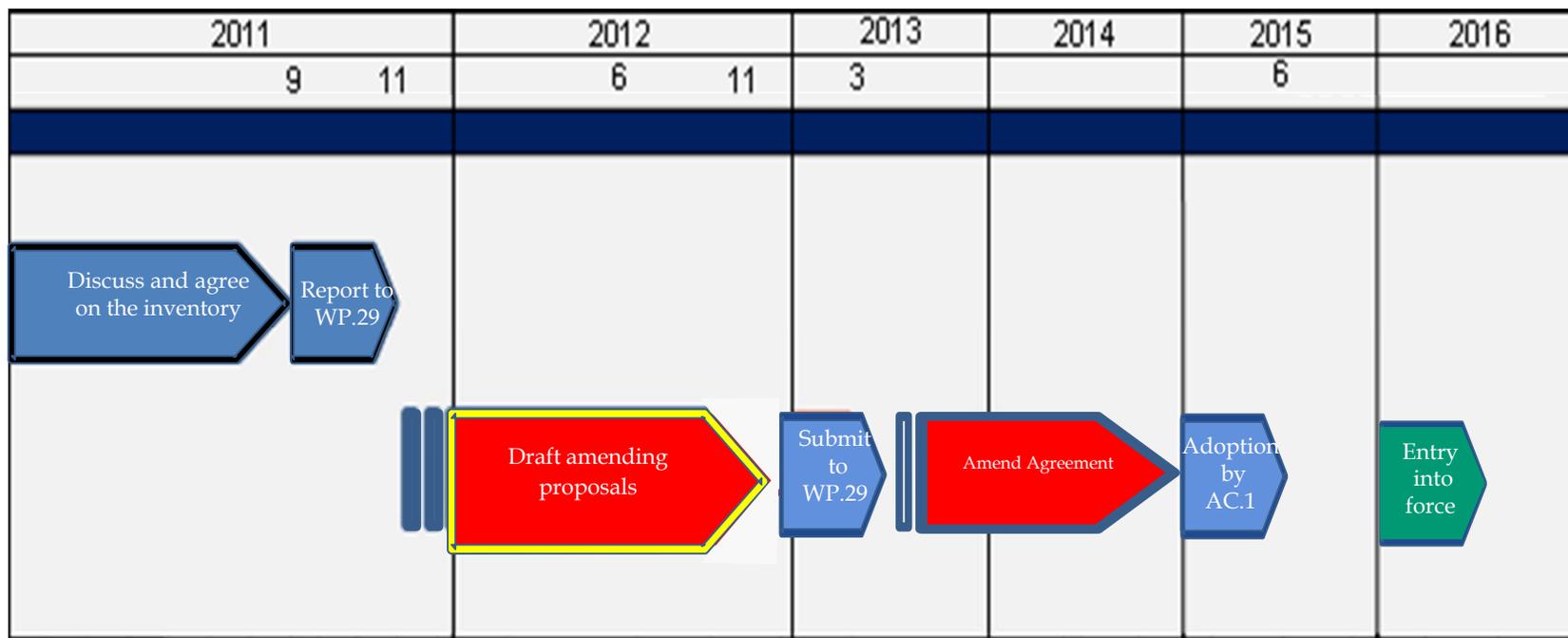


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Roadmap for Revision 3 to the 1958 Agreement:



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WP.29 activities



Emissions of pollutants and CO₂



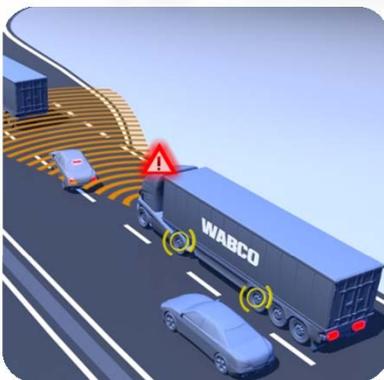
General safety



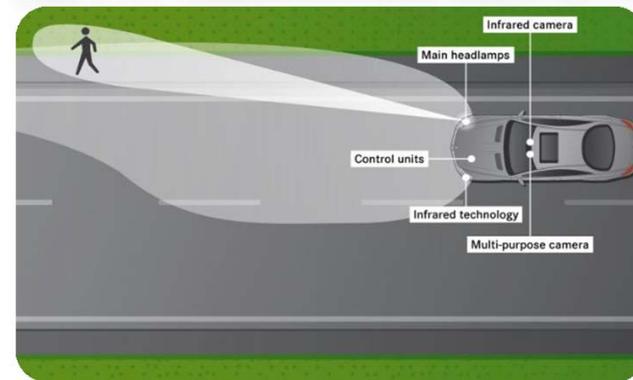
Passive safety



Noise



Active safety



Lighting and light signalling





Active Safety

GRRF Activities on brakes and running gear:

Anti-lock braking systems (ABS): 1990

Regenerative braking systems: 2008

Electronic Stability Control (ESC): 2008

Tyre Pressure Monitoring Systems (TPMS): 2010

Advanced Emergency Braking Systems (AEBS): 2012

Lane Departure Warning Systems (LDW): 2012

GRE Activities on lighting and light-signalling:

Conspicuity/Contour markings: 2006

Dedicated Daytime Running Lamps (DRL): 2007

Adaptive Front-lighting Systems (AFS): 2007

LED headlamps: 2008





Passive Safety

- Safety belts: 1970
- Protective helmets: 1972
- Child Restraint Systems: 1981/2013
- Frontal and lateral crash tests: 1995
- Pedestrian safety GTR: 2008
- ISOFIX anchorages: 2002
- Safety-belt reminders: 2009
- Electric vehicle safety: 2010/2013
- Pole side impact: 2014





General Safety

- Indirect vision systems (mirrors & camera monitor): 1981/2005/(2015)
- Safety glazing materials: 1981/2008
- Rear Underrun Protection: 1982/(2015)
- Superstructure of buses and coaches: 1986/2010
- Liquefied Petroleum Gas (LPG): 1987
- Vehicle alarm systems: 1997
- Compressed/Liquefied Natural Gas (CNG/LNG): 2000/2013
- Burning behaviour: 2005
- Automatic Emergency Call Systems: (2015)
- Lane Keeping Assist Systems (LKAS)

WP.29 informal group on:

- Intelligent Transport Systems (ITS): ADAS & autonomous vehicles





Environmental Protection

GRPE Activities on pollution and energy:

Battery Electrical Vehicles (EV): 1996

Measurement procedure for CO2 emissions (Fuel consumption): 1997

Hybrid/Electric Vehicles (HEV): 2004

Bio-Fuels and Plug-in Hybrid/Electric Vehicles (PHEV): 2008

Market Fuel Quality (FQ): 2010

Hydrogen & Fuel Cell vehicles (HFCV): 2010/2013

Environmentally Friendly Vehicles (EFV) – Feasibility: 2011

Worldwide Harmonized Light Vehicle Test Procedures (WLTP): 2014/(2018/20)

GRB Activities on noise:

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

Tyre rolling noise and wet grip adhesion: 2007

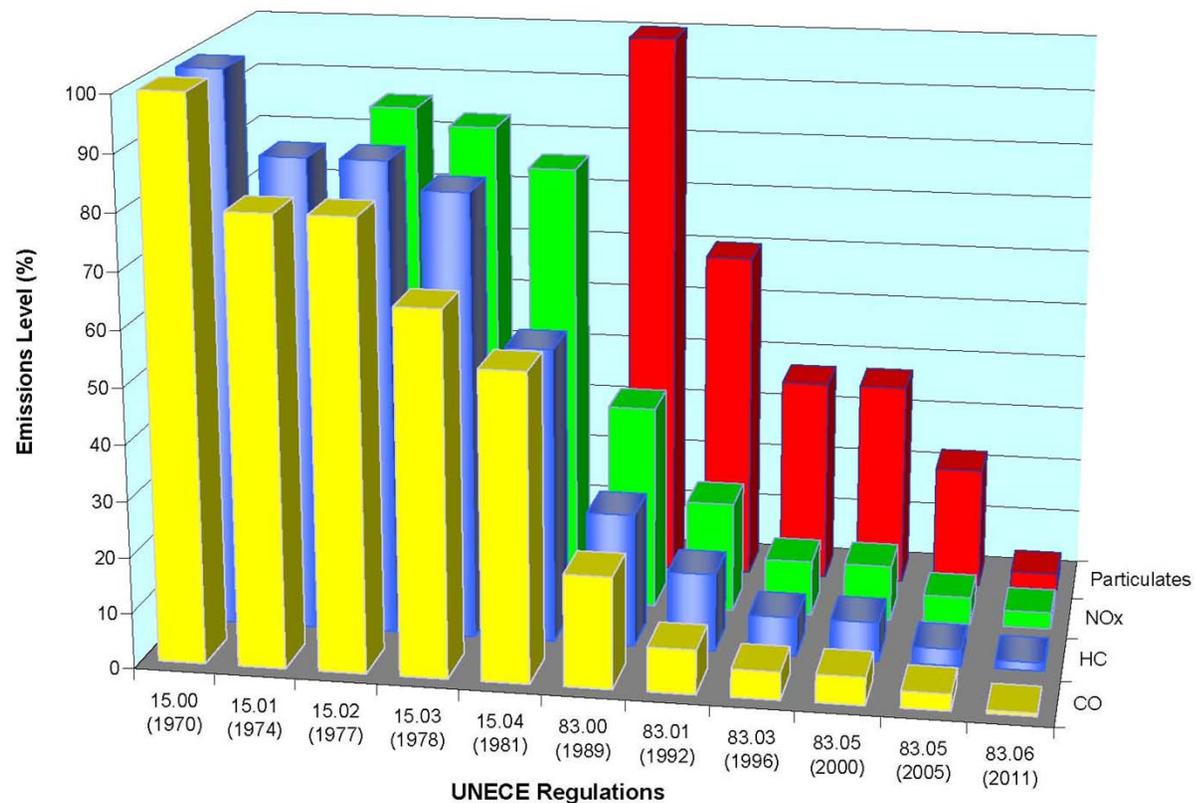
New noise measurement method: 2007 – new limit values: (2014)

Tyres Rolling Resistance: 2010



Environmental Protection

EVOLUTION OF EMISSIONS LIMITS OF PASSENGER CARS



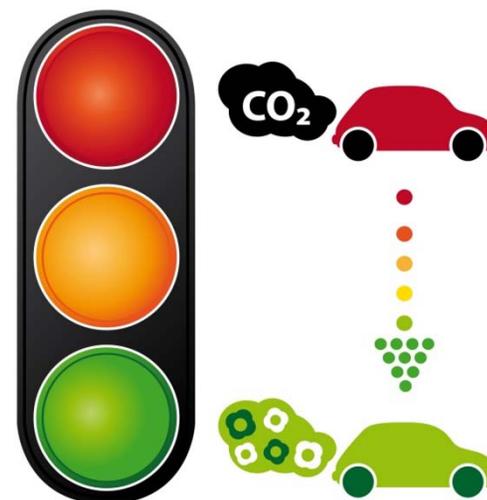


A possible strategy for climate change

By 2015: 30% increase in energy efficiency for all new advanced vehicle technologies

By 2025: New environmentally friendly vehicles (e.g. plug-in hybrid electric vehicles, hydrogen and fuel-cell vehicles)

By 2040: Full electric vehicles (need for sustainable electricity/hydrogen)





Thank you for your attention



More information at: <http://www.unece.org/trans/main/welcwp29.html>