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UN Vehicle Agreements

Type Approval Certification Periodic Technical Inspection

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Vehicle Regulations and Transport Innovations Section



Content

- I. WP.29
 - a) WP.29 Activities
 - b) WP.29 scope and organization

- II. The tools of WP.29
 - a) Vehicle approval: the 1958 Agreement
 - b) Vehicle certification: the 1998 Agreement
 - c) Periodic technical inspections (PTI): the 1997 Agreement

- III. Better vehicles by implementation of the UN Vehicle Agreements



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

- UNECE Sustainable Transport Division: secretariat to WP.29 for more than 60 years
- WP.29 is:
 - the unique worldwide regulatory forum for the automotive sector
 - administering three Multilateral UN Agreements



Construction regulations

1958 Agreement – Type Approval Regulations with mutual recognition of the type approvals

1998 Agreement – Global Technical Regulations

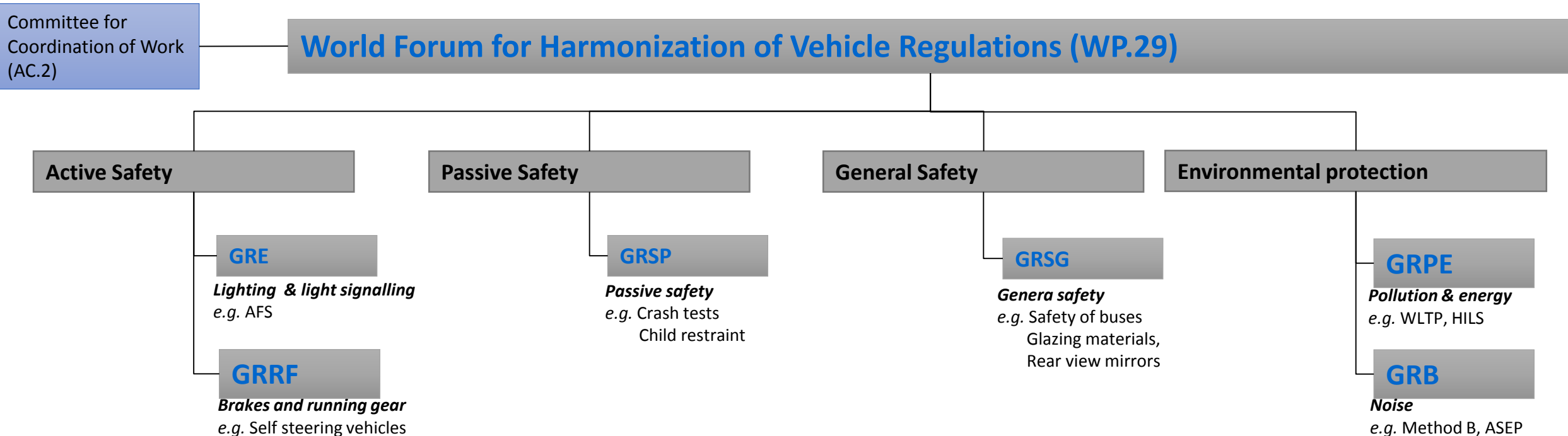


In Use PTI regulations

1997 Agreement – Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspection

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)



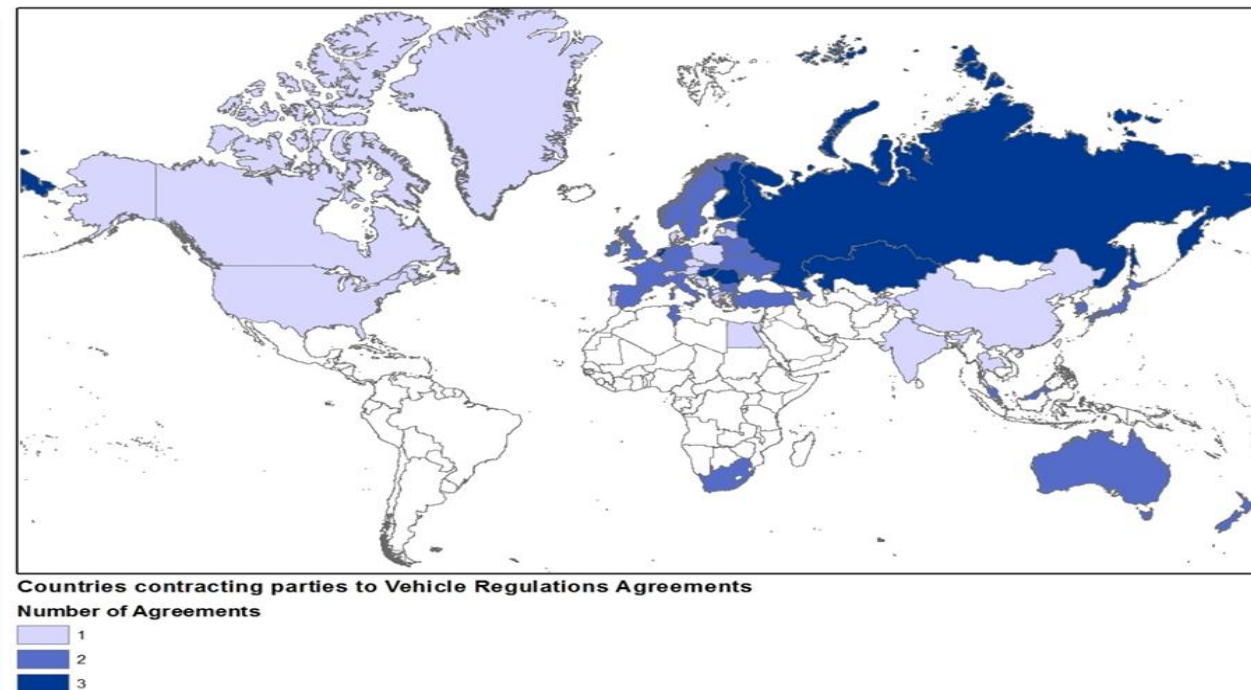
and ~40 non-permanent technical groups



WP.29 is worldwide, unique and transparent

- Agreements open to all Nations of the UN
- Participation open to States, Governmental Organizations (GOs) and NGOs, but

**Decisions are taken by Governments
(of CPs)**



No other worldwide organization covers this area

What is WP.29 doing?



Emissions of pollutants and CO₂



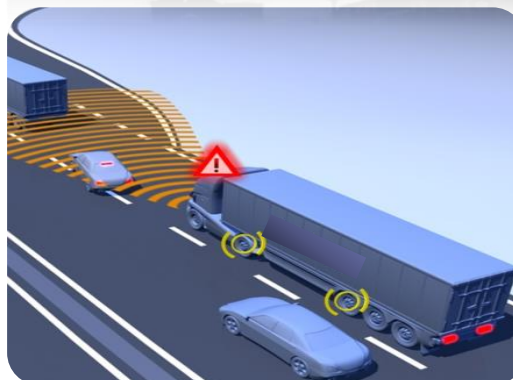
General safety



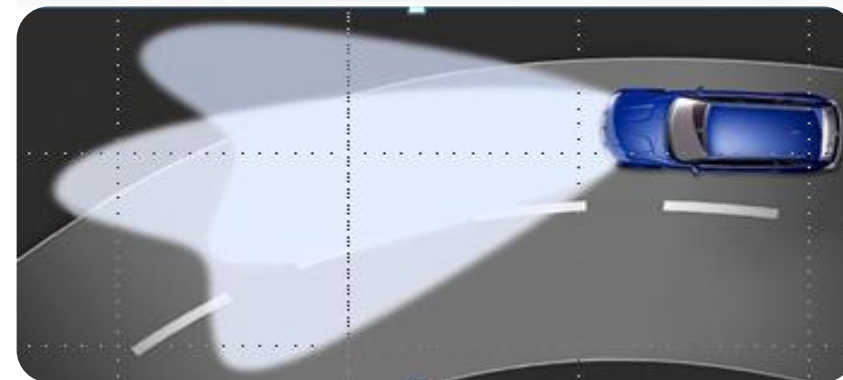
Passive safety



Noise



Active safety



Lighting and light signalling

The Agenda 2030 and Road Safety

The Sustainable Development Goals (SDGs)

Two targets are directly relevant for road safety



3.6. By 2020, halve the number of global deaths and injuries from road traffic accidents.



11.2. By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

TRANSPORT



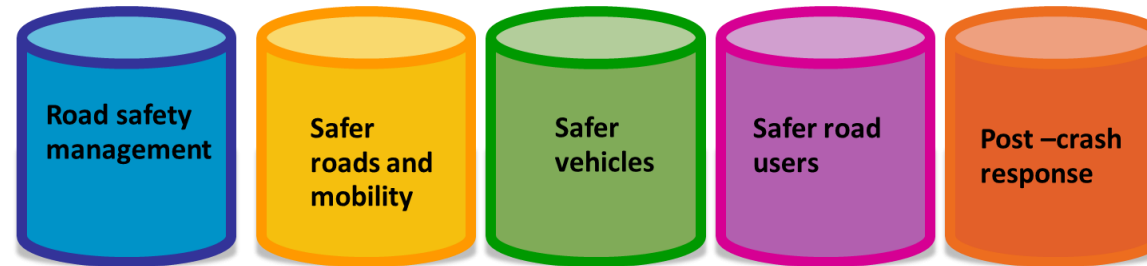
UN decade of action for road safety 2011-2020



The plan



The 5 pillars



X

X



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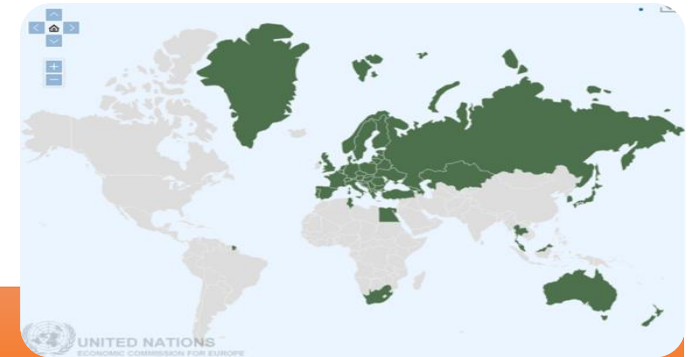
- III. Better vehicles by implementation of the UN Vehicle Agreements



Principal Elements of the 1958 Agreement

Eligible Contracting Parties to the 1958 Agreement:

Members of UN



The 1958 Agreement provides:

Legal framework for the adoption of uniform UN Regulations on the vehicle construction

Reciprocal recognition of Type Approval
Approved once and accepted everywhere (CPs)

Elimination of barriers to trade



Principal Elements of the 1958 Agreement

- All vehicle parts and systems approved according to UN Regulations under the 1958 Agreement bear the unique **E**-marking



- The Type-Approval with an approval number and the approval date + test reports

Latest Developments in Vehicle Regulations

- Revision 3 to the 1958 Agreement will enter into force on 14 September 2017
- Evolution of the Agreement (Revision 3):
 - (a) allowing the Contracting Parties to grant type approvals according to former versions of UN Regulations annexed to the 1958 Agreement;
 - (b) adding new provisions for the International Whole Vehicle type Approval (IWVTA) system;
 - (c) establishing, at UNECE, an electronic Database for the Exchange of Type Approval documentation (DETA) between all the Contracting Parties to the Agreement;



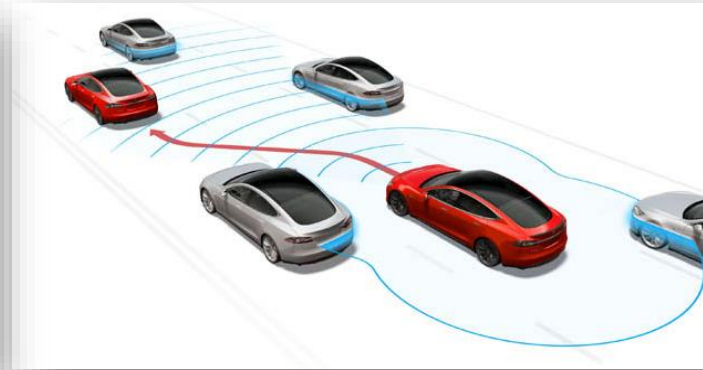
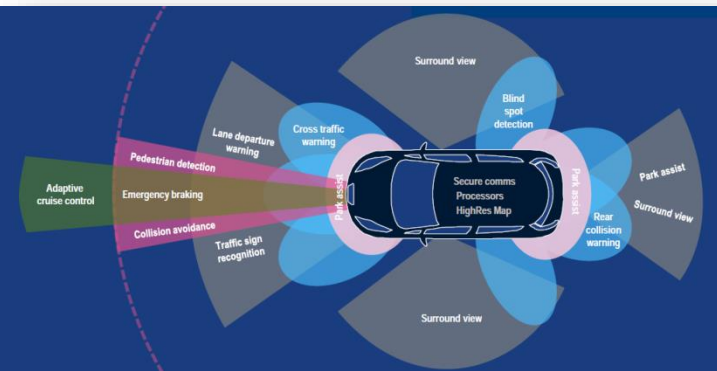
Latest Developments in Vehicle Regulations (cont.)

- (d) modifying the voting conditions for the adoption of new UN Regulations or their amendments to existing UN Regulations (i.e. from the two-thirds majority under Revision 2 to four-fifth majority under Revision 3); and
- (e) reviewing and strengthening the current provisions with the aim to improve the functioning and reliability of the type approval procedures and the conditions for their mutual recognition (i.e. quality assurance assessment, certification and conformity of production procedures, the tasks, responsibilities and competences of involved parties and aspects related to enforcement such as ensuring market surveillance and safeguard measures).



Latest Developments in Vehicle Regulations

WP.29 is the forum where the performance requirements and the technical regulations applicable to automated vehicles are defined :



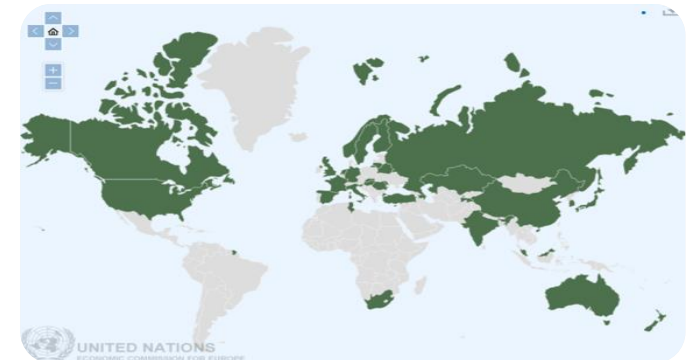
WP.29 committed to continue improving the safety and environmental performance of vehicles:

- Blind Spot Monitoring
- Safety of Electric Vehicles
- WLTP...
- Child restraint systems
- Safety belt anchorages
- Quiet road vehicles ...

Principal Elements of the 1998 Agreement

Eligible Contracting Parties to the 1998 Agreement:

Members of UN



The 1998 Agreement provides:

Legal framework for the adoption of uniform Global Technical Regulations
- UN GTRs -

No administrative provisions
(for self certification and homologation)



Principal Elements of the 1998 Agreement

Contracting Parties to the 1998 Agreement

Commit themselves to implement a GTR into national legislation, when voting in favour

Need a system/agency for market surveillance and enforcement of production compliance

The 1998 Agreement requests

Regular reporting by Contracting Parties on the implementation of GTRs in their national law



Latest Developments in Vehicle Regulations

- New Global Technical Regulations
 - No. 17 on crankcase and evaporate emissions of L category vehicles
 - No. 18 on OBD for L category vehicles
 - No. 19 on evaporate emissions WLTP
- Draft Global Technical Regulation (for adoption in November)
 - No.20 on electric vehicle safety
- Amendments to existing Global Technical Regulations:
 - No.1 on door locks and door retention systems
 - No.15 on WLTP
 - No.16 on tyres



Principal Elements of the 1997 Agreement

Eligible Contracting Parties to the 1997 Agreement:

Members of UN



The 1997 Agreement provides:

Legal framework for the adoption of uniform UN Rules for PTI of vehicles in use

Reciprocal recognition of certificates of such inspections for cross-border use of vehicles



Principal Elements of the 1997 Agreement

1997 Agreement

UN Rule No. 1

UN Rule No. 2

(UN Rule No.3)

(UN Rule No.4)

Resolution R.E.6

- Facilities & equipment
- Skills & training
- Supervision

For environmental issues

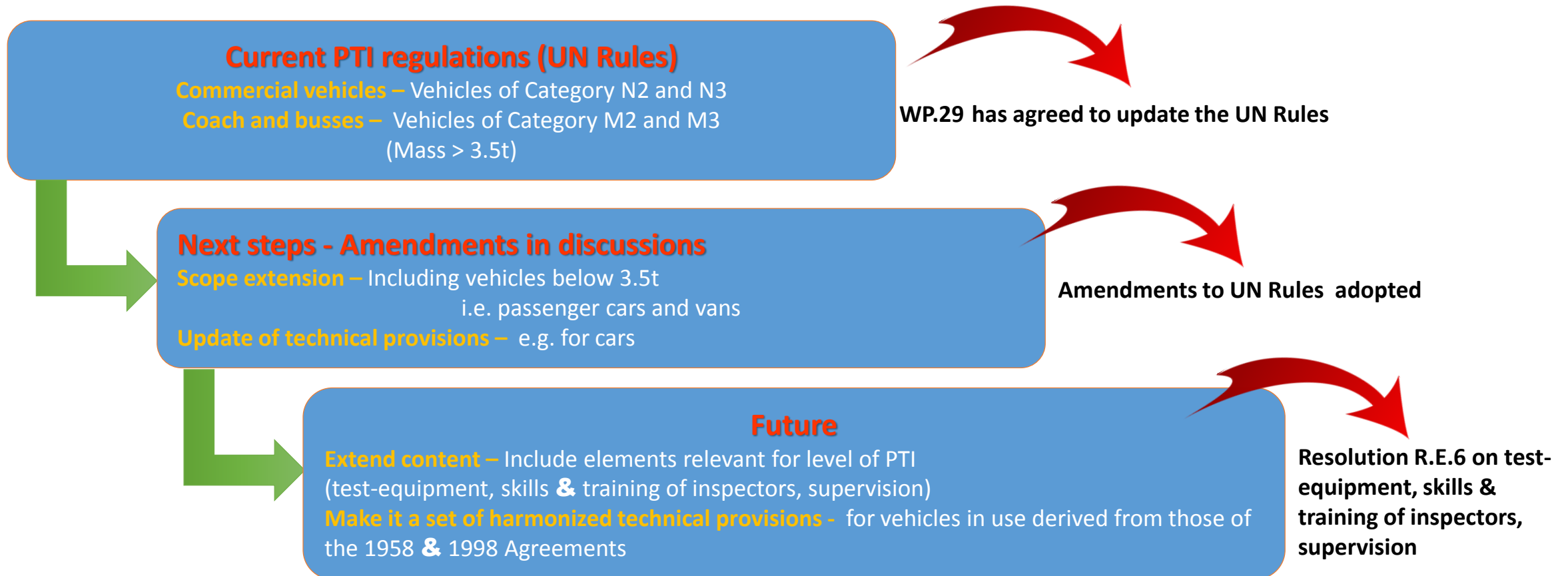
For safety inspection

For LPG/LNG vehicles

For electric and hybrid vehicles



Status of the 1997 Agreement



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Implementation of 1958 Agreement

- Amendments to national legislation
 - Requirements for vehicle approval (e.g. reference to UN Regulations)
 - Requirements for reciprocal recognition of UN Type Approvals
 - Requirements for vehicle registration (e.g. vehicle approval as prerequisite)
 - Responsibilities and sanctions
- Type Approval Authority
 - Administrative procedures for granting, extending, suspension of approvals
 - Assessment, designation and notification of technical services
 - Conformity of production procedures
 - Acting as liaison point to other TAAs and the WP.29 secretariat
- Technical Services
 - May also be private or located outside the country/in any other Contracting Party



Implementation of 1998 Agreement

- Amendments to national legislation
 - Full transposition of the UN GTR into national legislation
 - Introduce provisions for self-certification or homologation
 - Requirements for vehicle registration (e.g. vehicle certification as prerequisite)
 - Responsibilities and sanctions
- National Authority for market surveillance and enforcement of production compliance
 - Procedures for market surveillance and enforcement of production compliance
 - Technical capacity for performing compliance tests once vehicle models are put on the market
 - Enforcement of re-call activities and sanctions against manufacturers
 - Acting as liaison point to the WP.29 secretariat
 - Mandatory status report to AC.3



Implementation of 1997 Agreement

- Amendments to national legislation
 - Requirements for periodic technical inspection (e.g. reference to UN Rules and R.E.6)
 - Requirements for reciprocal recognition of PTI certificates for cross border traffic
 - Requirements for vehicle registration (e.g. PTI as prerequisite)
 - Responsibilities and sanctions
- National PTI Authority
 - Administrative procedures for granting, extending, suspension of authorisation for PTI test centres and for inspectors
 - Requirements for test centres, equipment, skills & training of inspectors and supervision of test centres
 - Acting as liaison point to other PTI Authorities and the WP.29 secretariat
- Test Centres

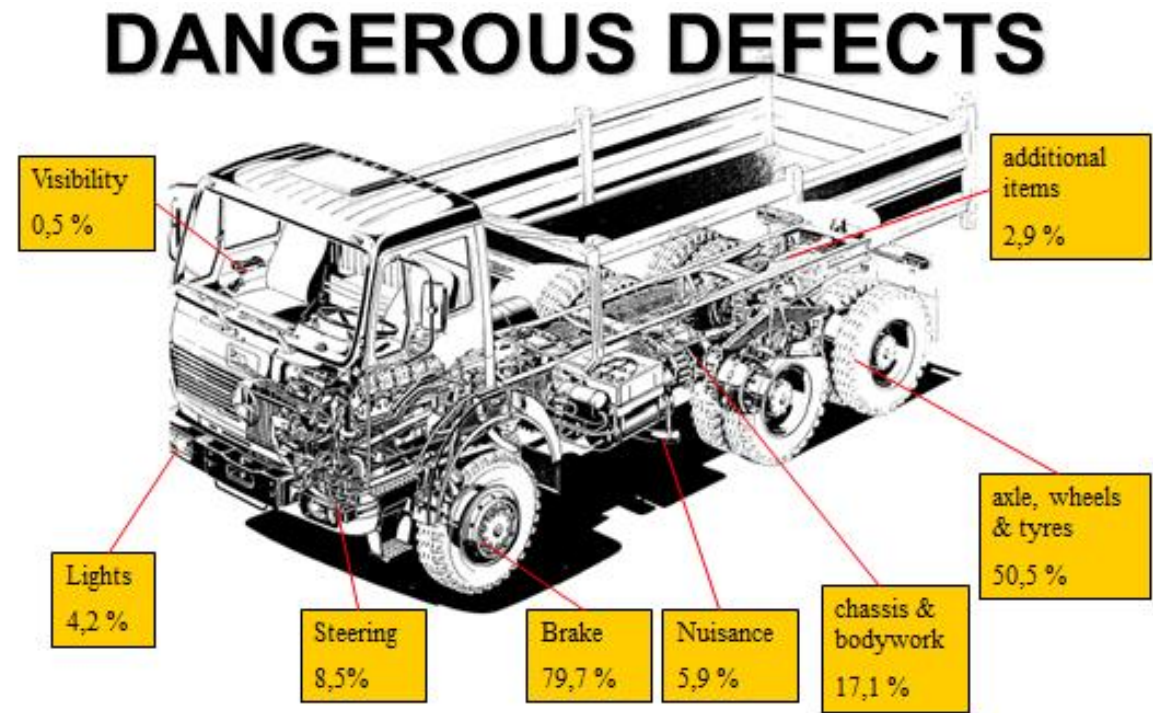


Why does it matter?

Why PTI ?

- Evidence base:
 - Technical defects related to fatal accidents (based on in-depth accident analysis)
 - 8 to 15% in high income countries (EU)
 - 15 to 25% in middle income countries
- 1997 Agreement?
 - New specifications for new technologies

Example of results of technical roadside inspections
(Austria '08)

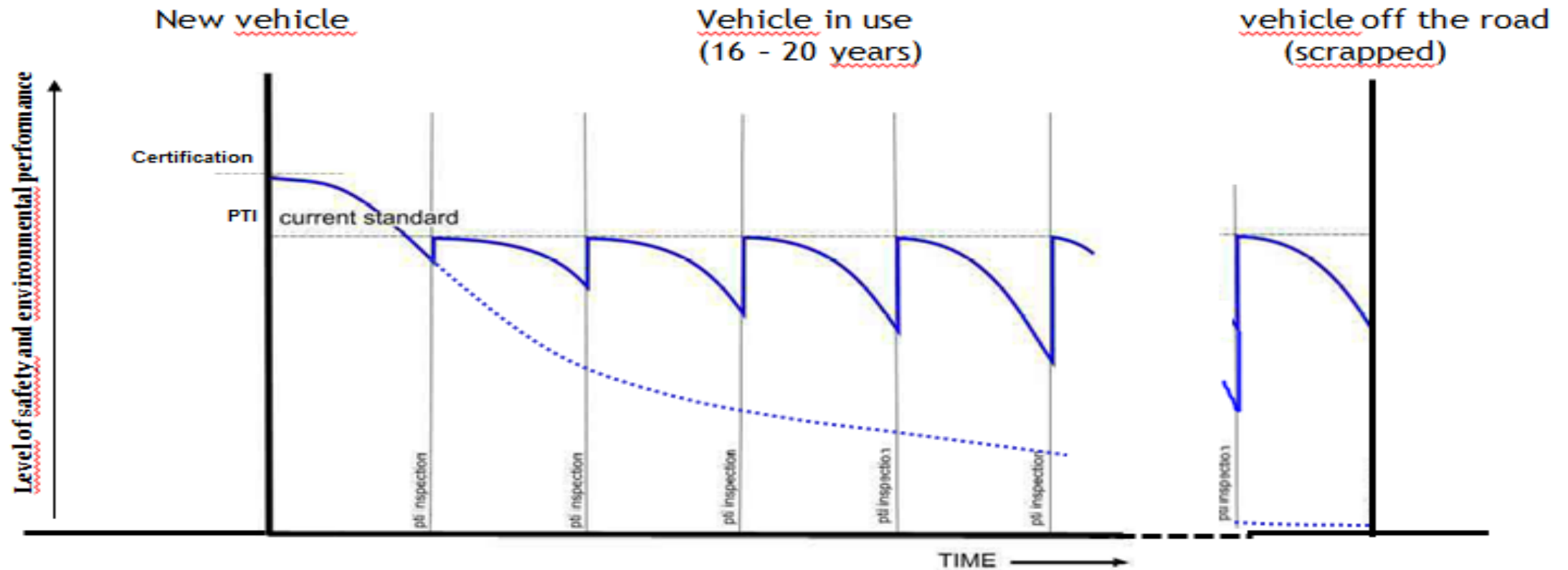


Why does it matter?

Vehicle Lifecycle

Vehicle certification

Periodic Technical Inspection



TRANSPORT



Why does it matter?

Why vehicle regulations?

Several versions of a given model, because:

- Left Hand Drive
- Right Hand Drive
- The US/Canada version
- The Rest of the World (e.g. for countries with low fuel quality)...



Type Approval

Testing

- Submission of the information document (documentation of the product)
- Performance of the tests prescribed
- (According to the provisions of the Regulation)

Approval

- Test report and documentation checked
- Type approval issued by the Authority

COP

- Conformity of Production (COP) process and checks (QM / QA)
- COP audit by the Authorities

In Use

- Some regulations require «in use» testing of products (e.g. in the field of emissions)

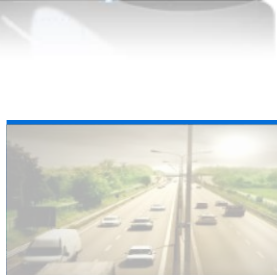
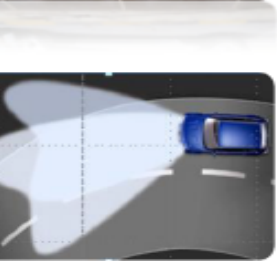
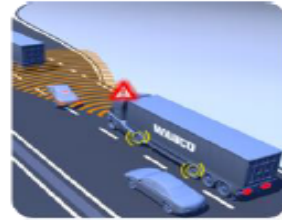
End or life

- One regulation is dedicated to the recyclability of vehicles



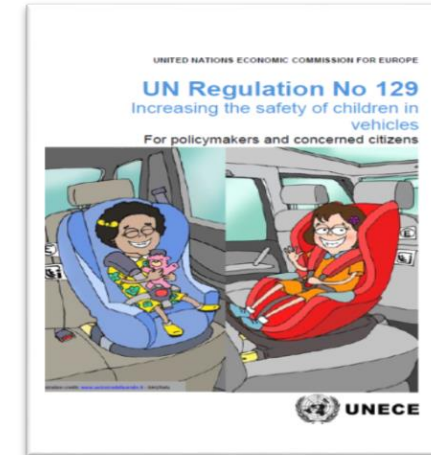
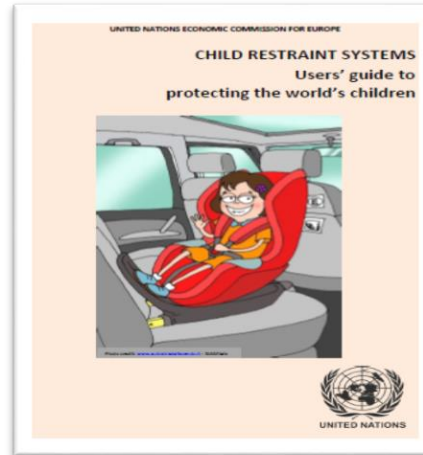
The most important UN Vehicle Regulations to make a change to road safety

Topic	Passenger cars UN Regulation	PTWs UN Regulation	Commercial vehicles UN Regulation
Active safety			
Brakes	R13 H (incl. ESC) R 140 GTR 8	R 78 (incl. ABS) GTR 3	R 13 (incl. EVSC)
Steering	R 79		R 79
<u>Tyres</u>	R 30/ GTR 16	R75	R 54
Mechanical couplings			R 55
Passive safety			
Helmets		R22	
Safety belts anchorages	R 14		R 14
Safety belts	R 16		R 16
Seats/ head restraints	R 17, R 25/ GTR 7		
Frontal collision	R 94		
Lateral collision/ pole side impact	R 95, R 135/ GTR 14		
Pedestrian safety	R 127/ GTR 9		
Child restraints	R 44		
Electric PTW safety		R 136	
Cabs strength			R 29
General safety			
Buses and coaches			R 107
Safety glazing	R 43/ GTR 6		R 43
Devices for indirect vision			R 46
Rear underrun protection			R 58
Lighting and light installation			
Installation of lighting	R 48	R 53, R 74	R 48

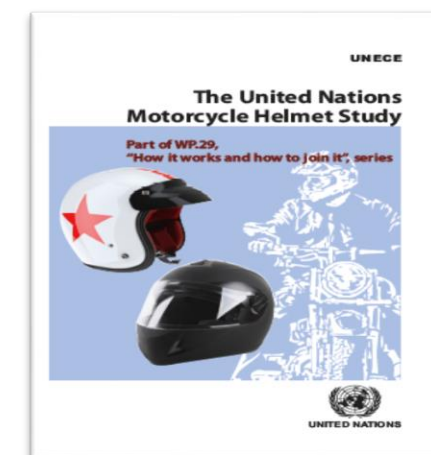
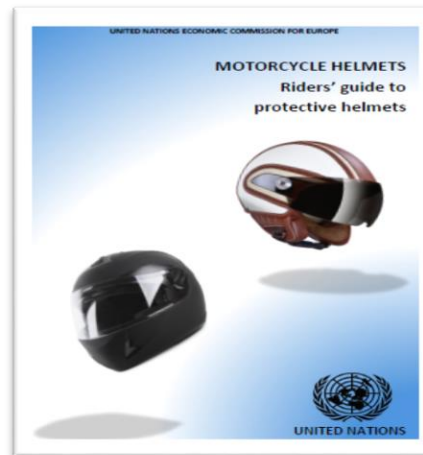


Leaflets and Publications

- Child restraint systems



- Motorcycle helmets





**THANK YOU
FOR YOUR ATTENTION**

UNECE Sustainable Transport Division

<http://www.unece.org/trans>

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