Albania Road Safety Performance Review
Capacity Building Workshop
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**UN vehicle regulations agreements**

- 1958 Agreement
- 1997 Agreement
- 1998 Agreement

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Secretary of the Working Party “WP.29/GRRF”
Focal Point ITS/AD
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   b) WP.29 scope and organization

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III. Better vehicles by implementation of the UN Vehicle Agreements
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III. Better vehicles by implementation of the UN Vehicle Agreements
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.
UN decade of action for road safety 2011-2020

The plan

The 5 pillars

- Road safety management
- Safer roads and mobility
- Safer vehicles
- Safer road users
- Post-crash response

X

X
Safe system approach

• A new approach for a safe system:
  • Because it is unacceptable to die or get heavily injured because of our mobility needs
  • Because the perfect driver does not exist. Human being can fail and are vulnerable
  • Safe system means: a system in which a mistake doesn’t mean Crash, and if any crash happen, it should not lead to death of injuries

• Levers:
  • Safer roads («self explanatory roads», «segregating road users», «forgiving roads»)
  • Appropriate speed (low speed if no traffic segregation e.g. in urban areas)
  • Safer vehicles (construction, equipment and maintenance)
  • Safer usage of streets (traffic reduction, education etc.)
360 ° approach of UNECE

- **Regulatory work**
  To ensure widest possible geographical coverage of UN road safety international legal instruments

- **Policy dialogue**
  To strengthen road safety management and coordination

- **Analytical work**
  To assist in the identification of best practices

- **Technical Assistance**
  To assist countries in the ECE region and beyond to implement international transport and road traffic safety legislation
The World Forum for Harmonization of Vehicle Regulations (WP.29)

- UNECE Sustainable Transport Division: secretariat to WP.29 for more than 70 years
- WP.29 is:
  - the unique worldwide regulatory forum for the automotive sector
  - administrating 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

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

Committee for Coordination of Work (AC.2)

- Active Safety
  - GRE
    - Lighting & light signalling
    - e.g. AFS
  - GRRF
    - Brakes and running gear
    - e.g. Self steering vehicles

- Passive Safety
  - GRSP
    - Passive safety
    - e.g. Crash tests
    - Child restraint

- General Safety
  - GRSG
    - General safety
    - e.g. Safety of buses
    - Glazing materials,
    - Rear view mirrors

- Environmental protection
  - GRPE
    - Pollution & energy
    - e.g. WLTP, HILS
  - GRB
    - Noise
    - e.g. Method B, ASEP

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
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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.

**E stands for Excellence Effective Economic Efficient...**

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

• More than 140 Regulations annexed to the 1958 Agreement
• Covering all kind of products and their parts

• Evolution of the Agreement (Revision 3):
  • Entry into force: 14 September 2017
  • Possibility to apply former versions of a UN Regulation
    (e.g. possibility to use EURO 4 or EURO 5 while we are now at EURO 6)
  • Stricter requirements for the nomination of Technical Services
  • DETA (Database of the exchange of Type Approval documentation) - *forthcoming*
Latest Developments in Vehicle Regulations

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

- Blind Spot Monitoring
- Safety of Electric Vehicles
- WLTP...

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

For environmental issues

For safety inspection

1997 Agreement

UN Rule No. 1

UN Rule No. 2
Status of the 1997 Agreement

Current PTI regulations (UN Rules) – In Force
- Commercial vehicles – Vehicles of Category N2 and N3
- Coach and busses – Vehicles of Category M2 and M3 (Mass > 3.5t)

Latest achievements – EIF in June 2018
- Scope extension – Including vehicles below 3.5 tons (i.e. passenger cars and vans)
- Update of technical provisions – corresponding to the scope extension

Future
- New Rules – For alternative powertrains e.g. NGV
- Amendment to the 1997 Agreement – Drafted by the IWG on PTI

Resolution R.E.6 on test-equipment, skills & training of inspectors, supervision

WP.29 has agreed to update the UN Rules
Aim of the Periodic Technical Inspection

Vehicle life cycle

New vehicle
Vehicle in use (16 – 20 years)
vehicle off the road (Recyling)

Level of safety and environmental performance
Certification level

Performance w/ PTI
Performance w/o PTI

Time
Complement to the 1997 Agreement

Resolution R.E.6 on

• test-equipment,
• skills of inspectors,
• training of inspectors,
• Supervision of test centers.

Aim: address the reasons that often defeat PTI

Aligned with the Directive 2014/45 (Roadworthyness / PTI)
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III. Better vehicles by implementation of the UN Vehicle Agreements
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 pre-requisite)
  • 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 pre-requisit)
  - Responsibilities and sanctions

- National PTI Authority
  - Administrative procedures for granting, extending, suspension of authorization 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)
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 pre-requisite)
  - 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
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)...
Why does it matter?

The same model of a same brand can have various levels of performance.
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

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<th>Commercial vehicles</th>
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How are used UN type approvals / certificates

1. System approvals
2. Whole Vehicle Type Approval
3. Certificate for a given vehicle
4. Registration
Case study: behavioral measures taken in France

Alcohol control measures

1970: 1.2 g/l offense rate, 0.8 g/l fine rate
1973-1974: speed limitations: 90 kph on normal roads, 110 kph on expressway, 130 kph on highway
1978: 1.2 g/l offense rate, 0.8 g/l fine rate
1982: speed limit on wet roads
1983: 0.8 g/l offense rate
1986: immediate withdrawal of the license in case of drunkenness
1990: 50 kph speed limit in urban roads
1995: 0.5 g/l fine rate
2003: between 0.5 & 0.8 g/l withdrawal of 6 points
2004: 0.2 g/l for public transport drivers
2010: alcohol lock on child public transport

Driving licence related measures

1973-1974: speed limitations: 90 kph on normal roads, 110 kph on expressway, 130 kph on highway
1986: immediate withdrawal of the license in case of drunkenness
1990: alcohol control at the initiative of the police
1999: Owner’s pecuniary liability
2003: Automatic speed control camera
2003: Automatic average speed control camera
2012: Automatic average speed control camera
2014: Automatic mobile speed control camera
2004: 6 Pts learner driving license
2004: 6 Pts learner driving license

Speed limitation measures

1970: 1.2 g/l offense rate, 0.8 g/l fine rate
1986: immediate withdrawal of the license in case of drunkenness
1990: alcohol control at the initiative of the police
1995: 0.5 g/l fine rate
2004: 0.2 g/l for public transport drivers
2010: alcohol lock on child public transport

TRANSPORT
Case study: technical measures taken in France

Active safety measures imposed to manufacturers on the construction of new vehicles:
- Regulation on the braking performance of cars, buses and trucks
- Safety belt for all in front seats
- Regulation on the braking performance of PTWs

Passive safety measures imposed to manufacturers on the construction of new vehicles:
- Crash tests Lateral impact & frontal impact (Offset)
- Safety belt for all in all seats
- ABS
- ESC
- Pedestrian protection
- ABS PTW
- Regulation on the braking performance of PTWs

Regulation on tyres for passenger cars
Case study: technical measures taken in France

16,000 14,000 12,000 10,000 8,000 6,000 4,000 2,000 0
Import of used vehicles

- The age of a vehicle doesn’t tell everything about:
  - Its performance
  - Its equipment

- Performance’s check of imported vehicles:
  - Periodic Technical Inspection
  - (Verification of approval numbers)
Leaflets and Publications

• Child restraint systems

• Motorcycle helmets
THANK YOU FOR YOUR ATTENTION

UNECE Sustainable Transport Division

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