



**THE UN ECE WORLD FORUM  
FOR HARMONIZATION  
OF VEHICLE REGULATIONS (WP.29)  
– RECOGNIZED LEADER  
IN DEVELOPMENT  
OF SAFETY REQUIREMENTS  
FOR THE ROAD VEHICLES**

**Dr. B.V.Kisulenko,  
WP.29 Chairman,  
The Russian Federation**

**APEC Kazan Auto Dialogue**

**2012**

# THE HISTORICAL NOTE

The World War II led to destruction of means of production, opening of the markets and expansion of the international trade

Absence of harmonization in technical requirements caused occurrence of technical barriers, repeated confirmation of compliance and increase of costs

Necessity of unification of requirements to vehicles and development of a mechanism of a mutual recognition of compliance assessment results

- **1949** Adoption of the Convention on Road Traffic
- **1952** Establishment of the WP.29 Working Group with a view of realization of the technical provisions stipulated in the 1949 Convention
- **1956** Conclusion of the Rome 4-party agreement on adoption of the first agreed provisions to headlights
- **1958** Conclusion of the Geneva Agreement and appointment of WP.29 as the administrative body of the Agreement
- **1997** Conclusion of the Vienna Agreement (technical inspections) under the WP.29 aegis
- **1998** Conclusion of the Global Agreement under the WP.29 aegis
- **2000** WP.29 transformation into the “World Forum for Harmonization of Vehicle Regulations (WP.29)”

# WP.29 PARTICIPANTS



## Countries – UN members

- European countries
- American countries (the U.S.A., Canada, Brazil, Argentina)
- Asian countries (Japan, Korea, the People Republic of China, India, Thailand)
- South Africa
- Australia, New Zealand

## Regional organizations of the economic integration

- European Union

## Non-governmental organizations

- Manufacturers' organizations (OICA, CLEPA, IMMA, etc.)
- Standardization organizations (ISO, IEC, SAE, etc.)
- Consumer and environment protection organizations (CI, CONCAVE, etc.)
- Organizations related to vehicle utilization (AIT/FIA, CITA, UNATAC, etc.)
- Other organizations

# WP.29 INTERNATIONAL AGREEMENTS

## WP.29

### 1958 Geneva Agreement

«Agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles... and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions»  
(127 UNECE Regulations)

50 Contracting Parties  
**Russia since 1987**

-The UNECE Regulations are voluntary applied by the Contracting Parties with a mutual recognition of results of compliance assessment

### 1998 Global Agreement

«Agreement concerning the establishing of global technical regulations for wheeled vehicles...»  
(12 GTR)

32 Contracting Parties  
**Russia since 2000**

The Contracting Parties transpose the CTR provisions into the national legislation

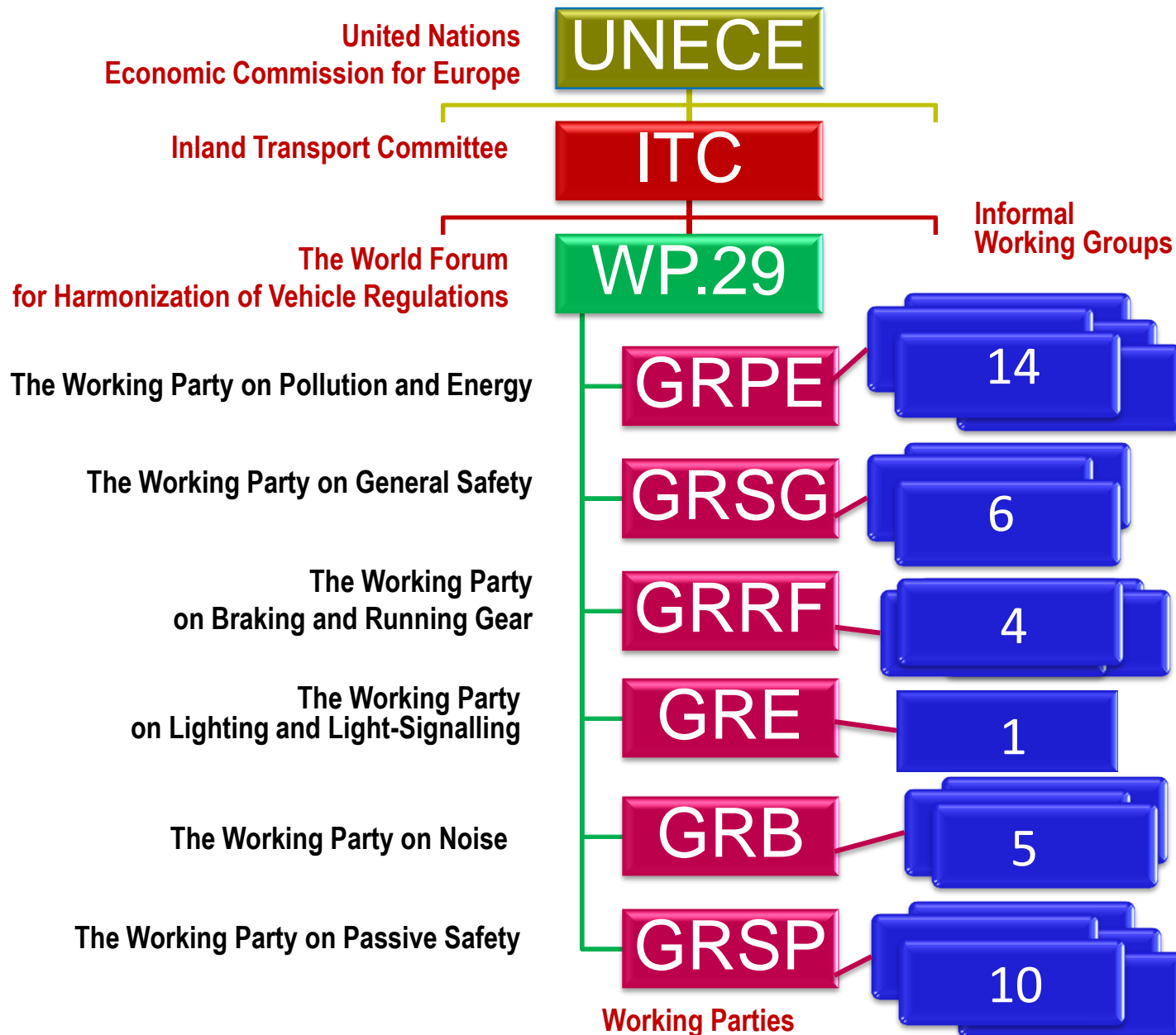
### 1997 Vienna Agreement

«Agreement concerning the adoption of uniform conditions for periodical technical inspections of wheeled vehicles and the reciprocal recognition of such inspections»  
(2 Rules)

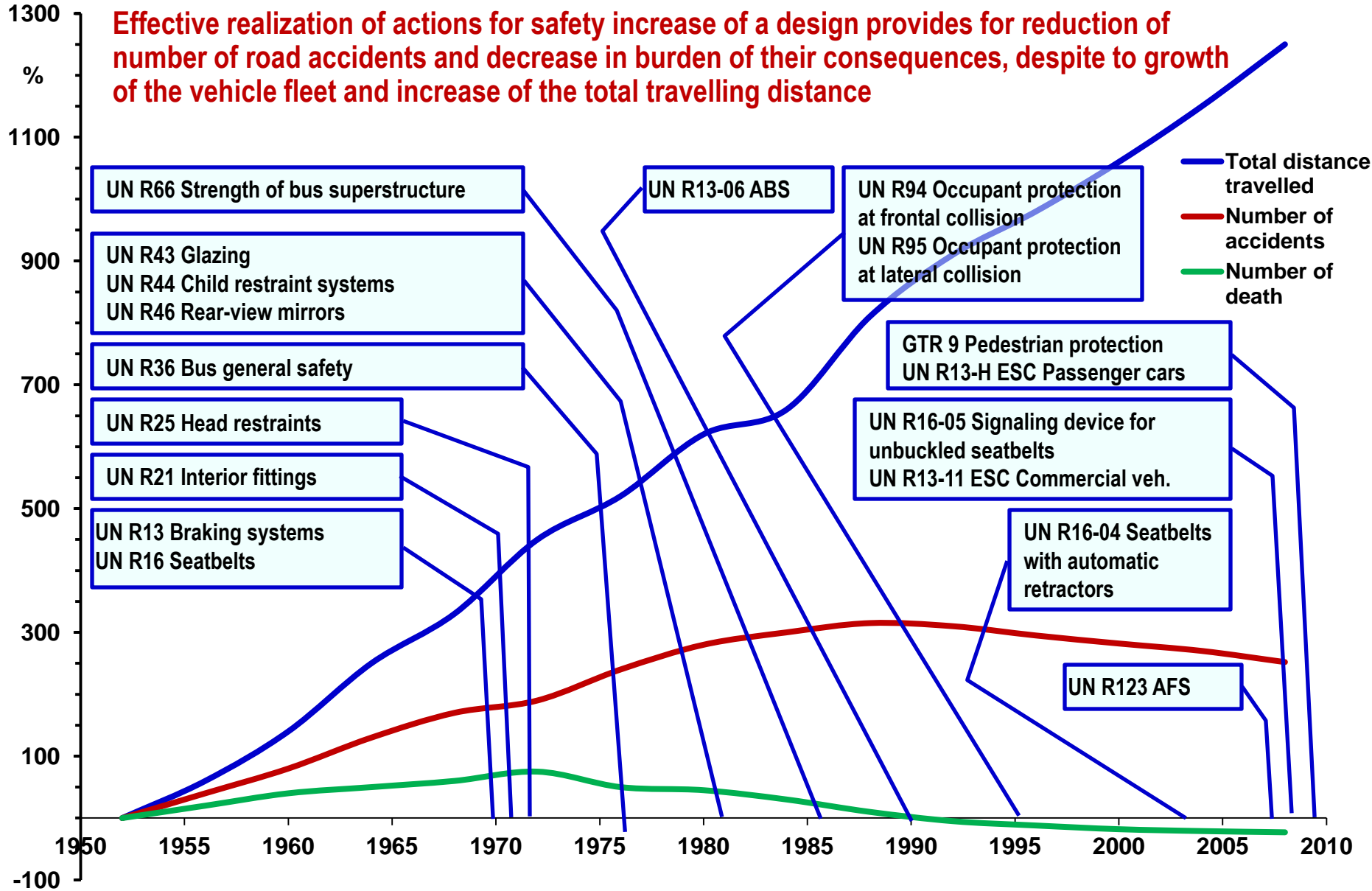
11 Contracting Parties  
**Russia since 1997**

The Rules include roadworthiness requirements for vehicles in operation

# WP.29 structure and activity



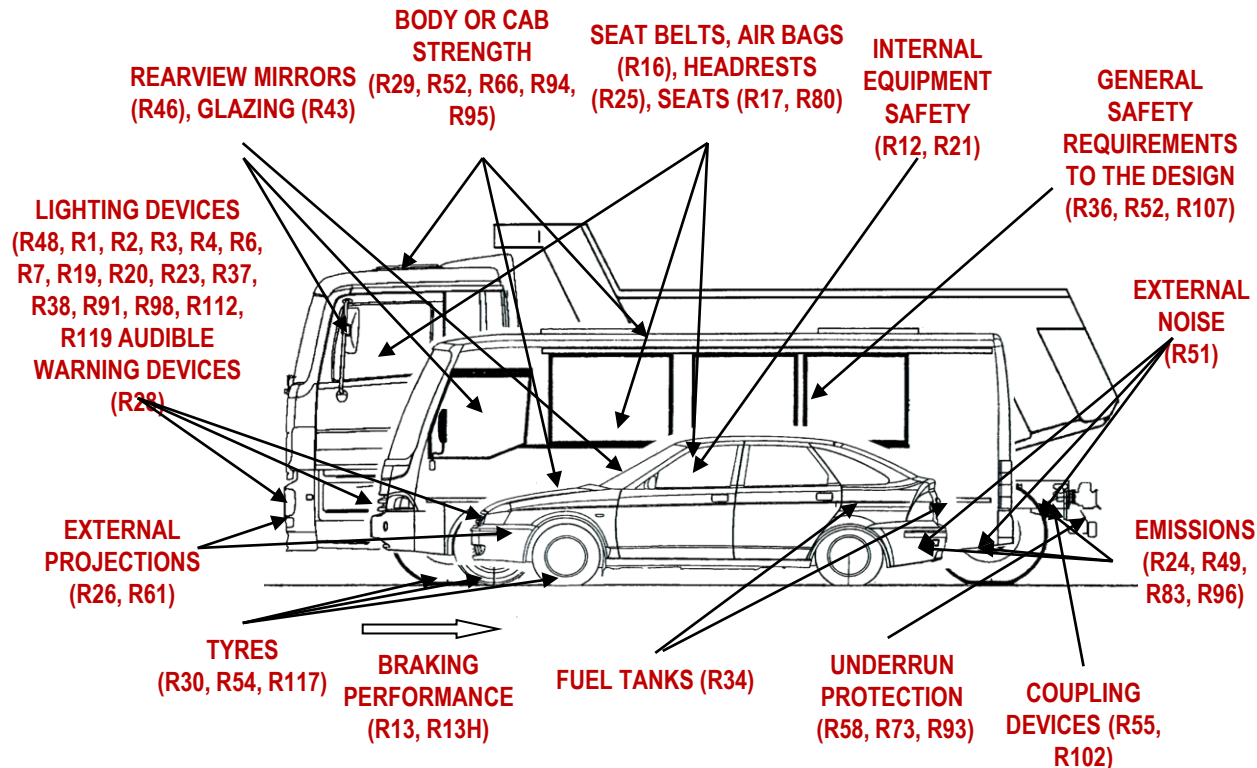
# SAFETY REQUIREMENT DEVELOPMENT STRATEGY



# ESTABLISHMENT OF SAFETY REQUIREMENTS

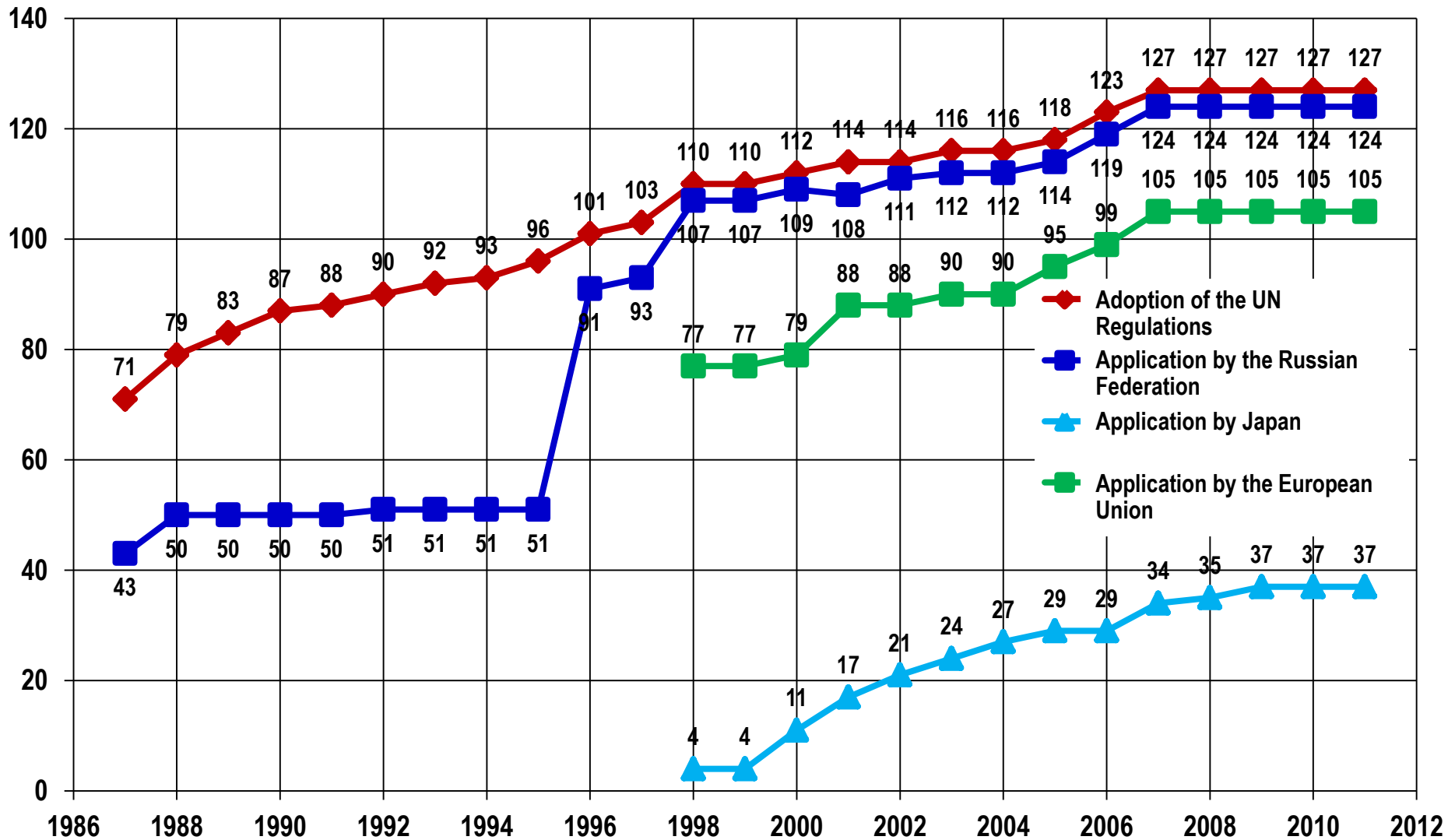
The number of objects of requirements applied to the different vehicle categories

Safety Kinds	Vehicle Category		
	Cars M1	Buses M2,M3	Trucks N1-N3
Active Safety	13	10	13
Passive Safety	16	10	16
Post-crash Safety	2	3	2
Ecological Safety	11	7	11
<b>Total</b>	<b>42</b>	<b>30</b>	<b>42</b>



The numbers of the UNECE Regulation are specified in brackets

# APPLICATION OF THE UN REGULATIONS BY CONTRACTING PARTIES





# DRAFT NEW UN REGULATIONS

- LED Lighting devices
- Pedestrian safety
- Line departure warning systems (LDWS)
- Automatic emergency braking systems (AEBS)
- Child restraint systems

# DEVELOPMENT OF GLOBAL TECHNICAL REGULATIONS (GTR)

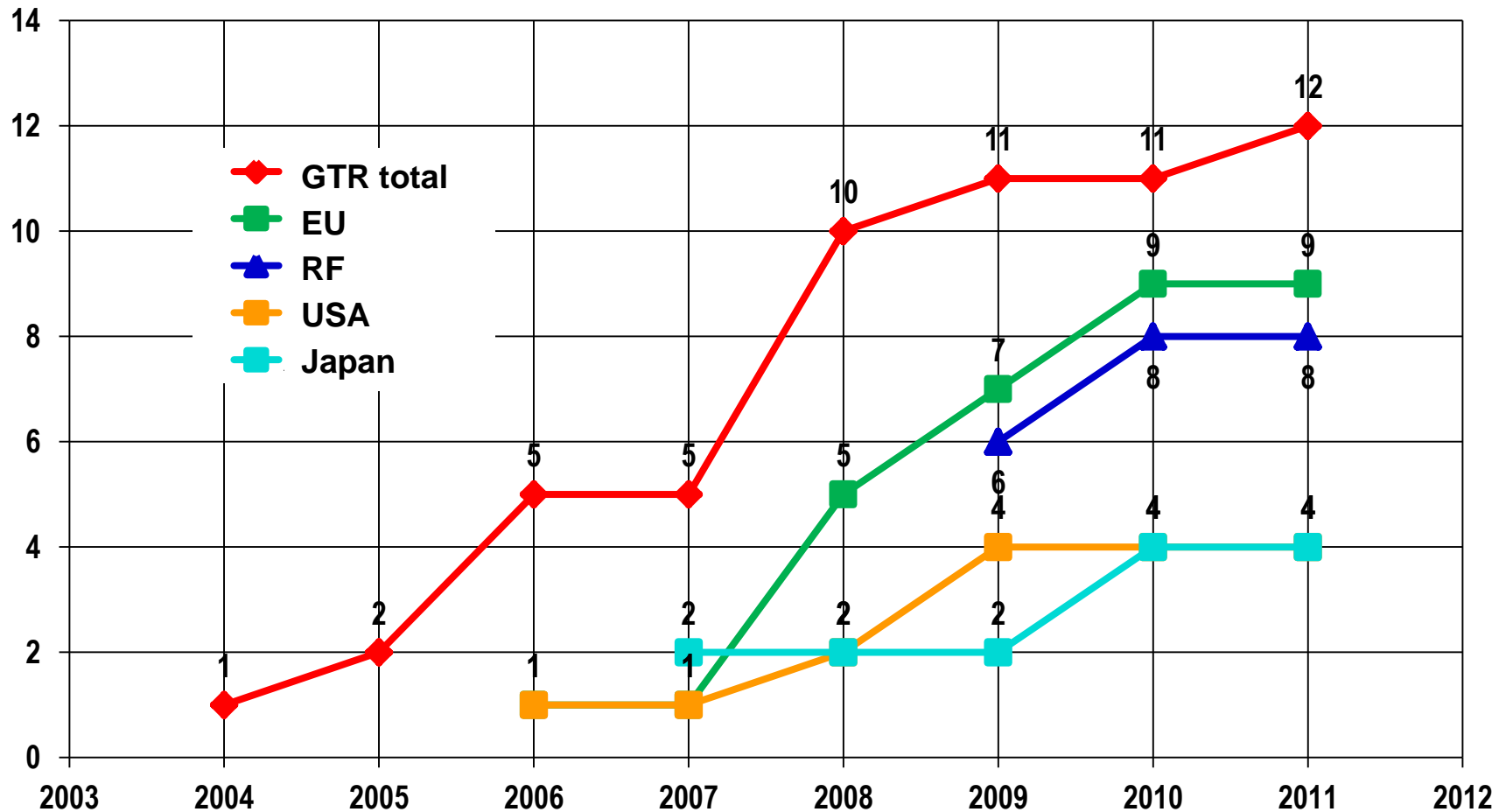
## Adopted (implemented through UN Regulations)

- 1 - Doors locks and door retention components (R11)
- 2 – Worldwide motorcycle test procedure (WMTC)
- 3 – Motorcycle brake systems (R78)
- 4 - Worldwide heavy duty engine test procedure (WHDC) (R49)
- 5 - On-board diagnostic systems (OBD) (R49)
- 6 - Safety glazing materials (R43)
- 7 - Head restraints
- 8 - Electronic stability control systems (ESC) (R13H)
- 9 - Pedestrian safety (R[ ])
- 10 - Off-cycle emissions (OCE) (R49)
- 11 – Non-road mobile machinery emissions (R[96])
- 12 – Motorcycle identification of controls

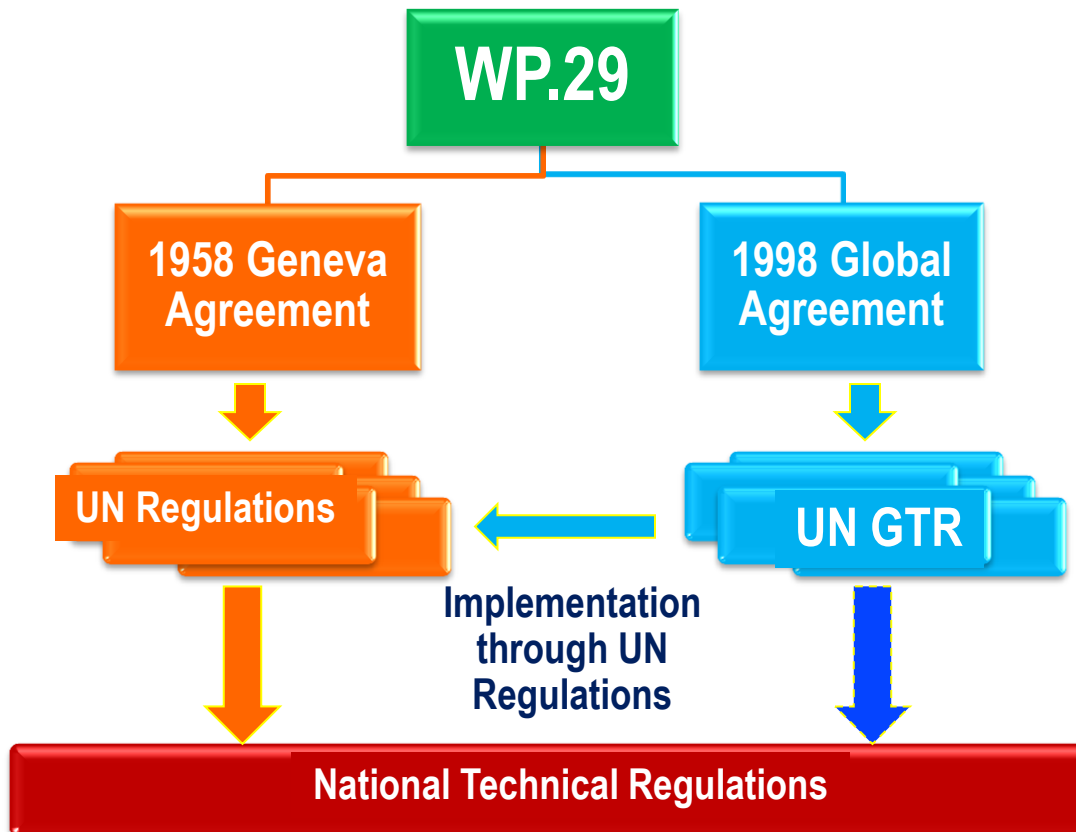
## Under development

- Head restraints (phase 2)
- Pedestrian safety (phase 2)
- Doors locks and door retention components (amendments)
- Worldwide heavy duty engine test procedure (WHDC) (amendments)
- On-board diagnostic systems (OBD) (amendments)
- Tyres for vehicles with GVW up to 4,536 kg(10,000 lbs)
- Hydrogen and fuel cell vehicles
- Electric vehicles
- Worldwide light vehicle test procedure (WLTP)
- Pole side impact (PSI)
- Side impact dummies
- Quiet vehicles

# APPLICATION OF THE UN GLOBAL TECHNICAL REGULATIONS (GTR) BY CONTRACTING PARTIES



# INTERNATIONAL REGULATIONS IN CONTRACTING PARTIES NATIONAL LAWS (1)

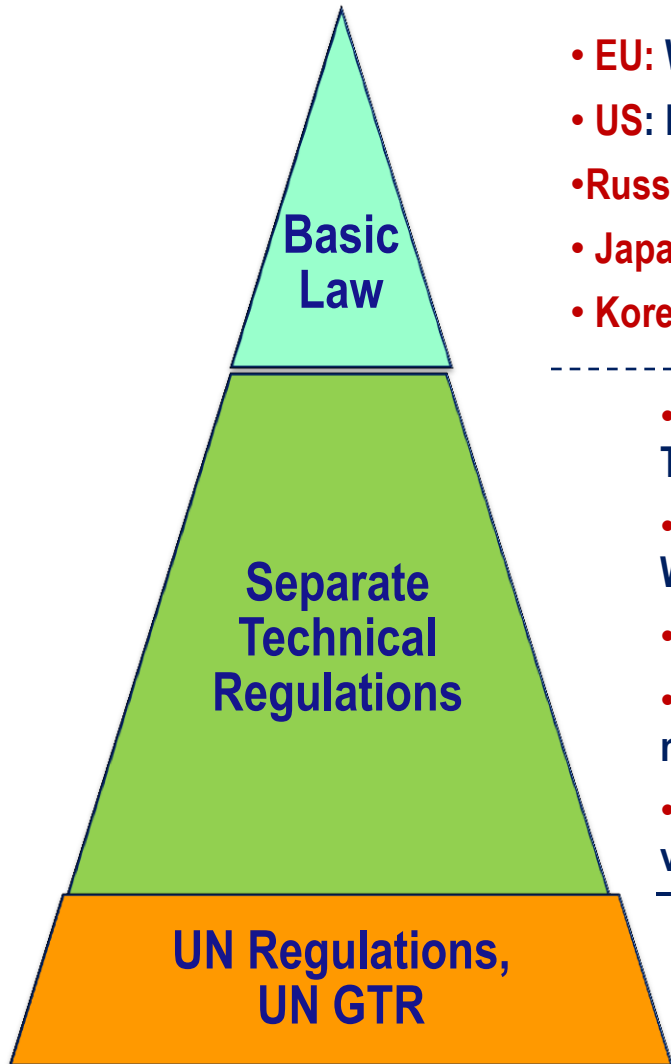


Only five Contracting Parties to the 1998 Agreement are not the Contracting Parties to the 1958 Agreement and do not use the mechanism of the mutual recognition of the compliance assessment

Country	National compliance assessment system
Canada	Self-certification
US	Self-certification
China	Third party approval
India	Third party approval
Moldova	Third party approval

- Implementation through direct reference to the UN Regulations or UN GTR
- Integration of the UN Regulation and UN GTR provisions into the national legislation

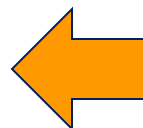
# INTERNATIONAL REGULATIONS IN CONTRACTING PARTIES NATIONAL LAWS (2)



## National Legislation:

- **EU:** WVTa Framework Directive (2007/46)
- **US:** Road Safety Act
- **Russia:** Federal Law On Safety of Road Traffic
- **Japan:** Road Vehicles Act
- **Korea:** Road Traffic Act and Automobile Management Act

- 
- **Russia:** Direct references to the UN Regulations (GTR) in the Technical Regulation On Safety of Wheeled Vehicles
  - **EU:** Direct references to the UN Regulations (GTR) in the WVTa Framework Directive (2007/46)
  - **US:** Implementation of the UN Regulations (GTR) in the FMVSS
  - **Japan:** Implementation of the UN Regulations (GTR) in the national regulations
  - **Korea:** Implementation of the UN Regulations (GTR) in the vehicle safety standards



**Adopted by WP.29**

# 1997 AGREEMENT ON VEHICLE TECHNICAL INSPECTIONS

- Rule № 1: Vehicle emission requirements
- Rule № 2: Requirements to vehicle identification, braking systems, steering, visibility, lighting devices, wheels, tyres, chassis, etc.
- Scope: Vehicle categories M2, M3, N2, N3, O3 and O4
- WP.29 decided to extend the scope to M1, N1, O1 and O2 vehicle categories

***Countries with developing economies, not having national system of periodic vehicle technical inspections, are invited to employ the WP.29 experience and apply the Rules № 1 and № 2 in the national legislation***

# THE UNITED NATIONS DECADE OF ACTION FOR ROAD SAFETY (2011-2020)

## Objective 3: Make Vehicles Safer

UN Member States are invited:

- To apply and promulgate motor vehicle safety Regulations developed by the WP.29
- To make all information of vehicle safety available to consumers
- To provide for vehicle fitting with the seat belts complying with the UN Regulations
- To introduce the advanced systems of active safety (electronic stability control, advanced braking systems etc)
- To apply safety Regulations concerning pedestrian protection

# WP.29: OPENING PROSPECTS

- **Development of provisions adapted to the technical progress**
  - **Intelligent Transport Systems (ITS)**
  - **Priority of driver's control**
- **Development of the International Whole Vehicle Type Approval procedure (IWVTA)**
- **Development of an electronic Database for the Exchange of Type Approval documentation (DETA)**



# REVISION OF THE 1958 GENEVA AGREEMENT

- A possibility for type approval pursuant to separate UN Regulations or set of requirements for a complete vehicle (IWVTA)
- Improvement of responsibility of technical services
- Introduction a database of type approval documentation and related information
- The various levels of stringency of requirements can be established in the UN Regulations

# **International WHOLE VEHICLE TYPE APPROVAL (IWVTA)**

- **First stage- for M<sub>1</sub> vehicle category**
  
- **Formation of the list of separate UN Regulations, composing the IWVTA requirements (UN Regulations and generally applicable regional requirements, which will be converted to UN Regulations)**

# **THE ADVANTAGES FOR CONTRACTING PARTIES OF 1958 AGREEMENT**

- **The type approvals can be granted pursuant to the lower level of requirements of the UN Regulations**
  
- **The Contracting Parties oblige to accept type approvals of higher level of the UN Regulations**

**THANK YOU FOR ATTENTION!**

The WP.29 documents are available in the Internet:

<http://www.unece.org/trans/main/welcwp29.htm>