Role of WP.29 and its future

NAONO Takashi

- Vice chair of WP.29

- Director of Safety Office

Vehicle Regulation and International Affairs Division

Road Transport Bureau, MLIT

About your presenter

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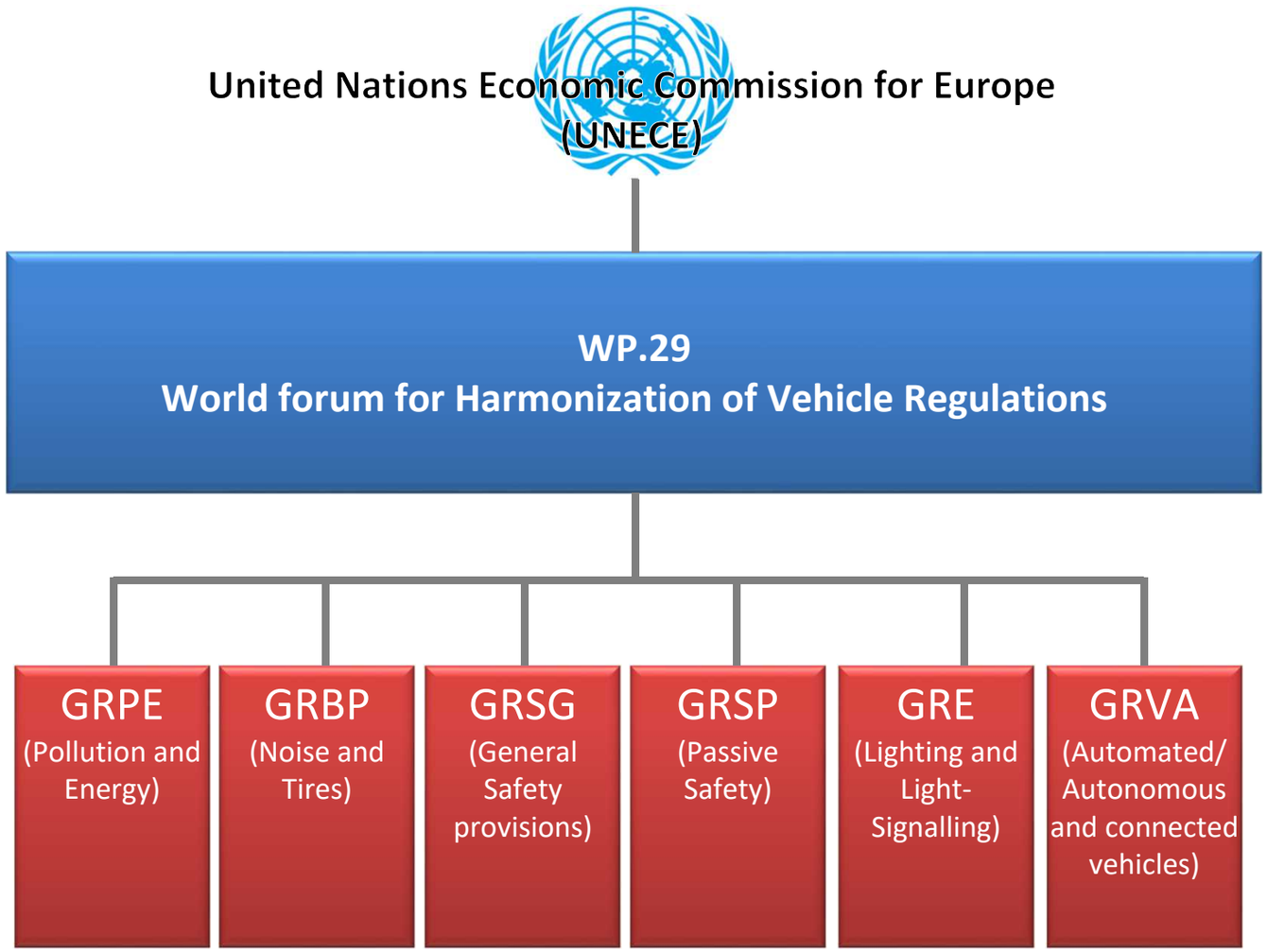
Career:
In April 2000, he started at the Ministry of Transportation (now the MLIT). From there, he joined the Automobile Inspection Department of the National Traffic Safety and Environment Laboratory and the JASIC Geneva Office before starting his current position.

Hobbies: Tennis, Mahjong

The following positions comprise the WP.29:
-Co-chair, ITS Expert Meeting
-Vice chair, Working Party on Automated/Autonomous and Connected Vehicles (GRVA)
-Vice chair, 1998 Agreement Executive Committee (AC.3)
-Vice-chair, World Forum on Harmonization of Automotive Standards (WP.29)
*First member to be selected outside of Europe (WP.29, November 2022)



1. Forum Purpose

To build an international standard for safe and environmentally friendly automobiles, working in harmony with the international community to create unified world recognition of vehicle certifications across borders.

2. Forum Organization

The Forum's six specialized subcommittees fall under the purview of the United Nations Economic Commission for Europe (UN/ECE). It is the job of these subcommittees to conduct studies vote on them in consideration for new standard proposals.

3. Forum Members

In addition to international governments, non-government organizations e.g., the International Automobile Manufacturers Association (OICA), International Motorcycle Manufacturers Association (IMMA), International Organization for Standardization (ISO), European Automotive Parts Industry Association (CLEPA) and the Society of Automotive Engineers (SAE) will be participating.

Overview of agreements: 1958, 1998

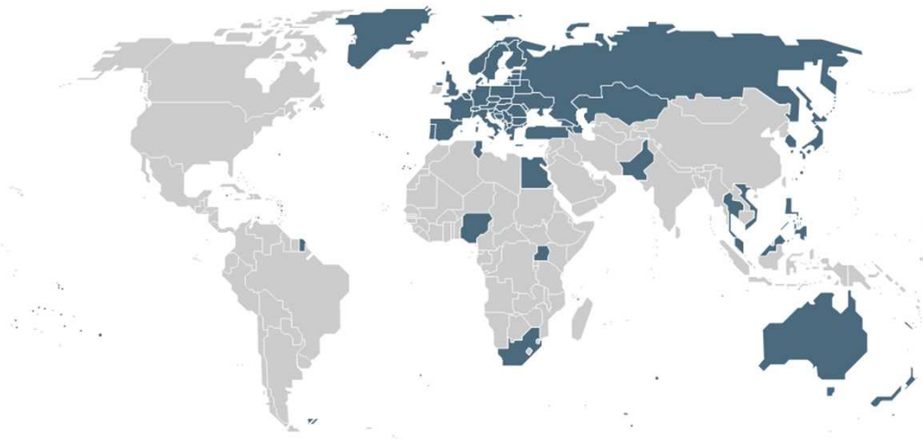
"The harmonious adoption of United Nations (U.N.) technical regulations on vehicles, regarding mutually recognized certifications for equipment and parts based on U.N. regulations."
(1958 Agreement)

1. Purpose of Agreement

This United Nations multilateral agreement signed in 1958 promotes cross-border harmonization of vehicle certifications, and is thusly a widespread promotion of safe and environmentally friendly vehicle usage. Its purpose is to facilitate the distribution of automobiles worldwide.

2. Status of Membership

59 countries; 1 region (the EU)



3. Status of established standards

169 U.N. regulations established

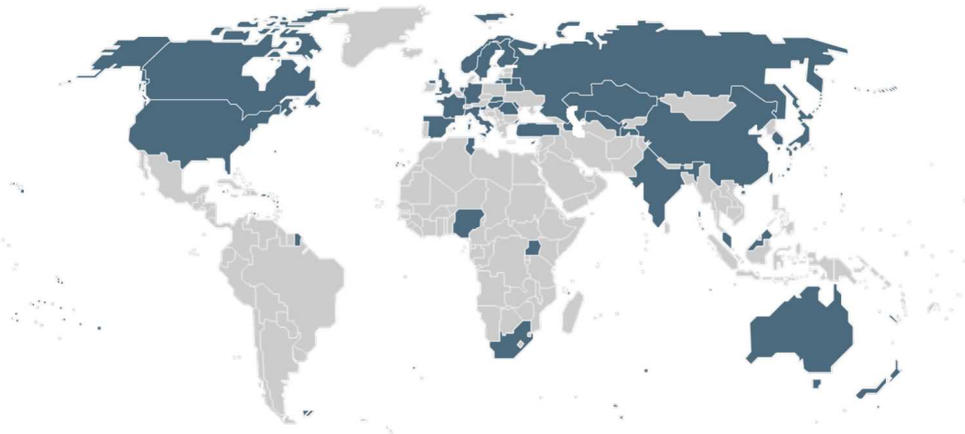
"Agreement on the Adoption of Global Technical Regulations (GTRs) for Vehicles, Devices and Parts Installed or Compatible with Vehicles (1998 Agreement)

1. Purpose of Agreement

With an eye toward improving safety and environmental neutrality of automobiles and automobile parts as well as the distribution of them worldwide, we draw on international resources to incorporate technical standards into rules that are rooted in the 1958 Agreement and the laws and regulations of each country. Our purpose was to harmonize adoptions of standards. Japan, the U.S.A and the E.U. took the initiative in drafting these standards that were adopted by the U.N. in 1998.

2. Status of Membership

38 Countries; 1 region (the E.U.)



3. Status of established standards

24 Global Technical Regulations (UN GTR) established

Commemorative meetings for 1958 and 1998 agreements

✓ All of WP.29, 1958 and 1998 agreements passed their milestones this year

WP.29 and the 1958 Agreement Commemoration Ceremony

Geneva, March 7, 2023

- At the 189th Plenary Session, a ceremony commemorating the 70th Anniversary of the establishment of WP.29 and the 65th Anniversary of the signing of the 1958 Agreement was held

1998 Agreement Commemoration Ceremony

Geneva, June 20, 2023

- At the 190th Plenary Session, a ceremony commemorating the 25th Anniversary of the signing of the 1998 Agreement was held

Rules and regulations established in WP.29

No.	NAME
	UNR
0	International Whole Vehicle Type Approval (IWVTA)
1	Headlamps
2	Headlamps
3	Reflex Reflectors
4	Rear Registration Plate Lamps
5	Sealed Beam Headlamps
6	Direction Indicators
7	Front and rear position (side) lamps, stop lamps and end-outline marker lamp
8	Halogen headlamps
9	Noise (Three-Wheeled Vehicles)
10	Electromagnetic Compati
11	Door Latches and Hinges
12	Steering Mechanism
13	Braking
13H	Braking (passenger car)
14	Safety Belt Anchorages
15	Exhaust emission
16	Safety Belt
17	Seats
18	Protection against unauthorized use (locking system)
19	Front Fog Lamps
20	Halogen headlamps (H4)
21	Interior Fittings
22	Motor cycles and mopeds helmet
23	
24	
25	
26	
27	
28	
29	
30	Pneumatic Tyres (Passenger Vehicle)
31	Halogen sealed beam headlamps
32	Rear-end collision
33	Head-on collision
34	Prevention of Fire Risks
35	Arrangement of foot controls
36	Construction of public service vehicles
37	Filament Lamps
38	Rear Fog Lamps
39	Speedometer and odometer
40	Exhaust emission (Motor cycle)
41	Noise (Motor Cycle)
49	Emissions of compression ignition and positive ignition engines
50	Lights (Moped, Motorcycle)
51	Noise
52	Construction of small capacity public service vehicles
53	Installation of Lights (Motorcycle)
54	Pneumatic Tyres (Commercial Vehicle)
55	Mechanical coupling
63	Noise (Moped)
64	Temporary-Use Spare Wheels/Tyres and Run Flat Tyres
65	Special Warning Lights
66	Strength of Super Structure
67	Specific Equipment Of Vehicles Using Lpg
68	Measurement Of The Maximum Speed
69	Rear Marking Plates for Slow-moving vehicles
70	Rear Marking Plates for Heavy and Long Vehicles
71	Driver field of vision (agricultural tractors)
72	Halogen Headlamps (HS1 for Motor Cycle)
73	Lateral Protection (Goods Vehicle)
74	Installation Of Lights (Moped)
82	Halogen Headlamps (HS2 for Moped)
83	The Emission Of Pollutants According To Engine Fuel Requirements
84	Measurement Of Fuel Consumption
85	Measurement Of Engine Power
86	Installation of Lights for agricultural tractors
87	Daytime Running Lamps
88	Retroreflective Tyres (Motor Cycle)
	d Limitation Devices
	cement Brake Lining Assemblies and Drum Linings
	Marker Lamps
	cement Silencing System (Motor Cycle)
	Underrun Protection
	ction of the Occupants in the event of a Frontal ion*
	ction of the Occupants in the event of a Lateral ion
96	Emission from Non-Road Mobile Machinery
97	Vehicle Alarm Systems (VAS)
98	Gas-Discharge Headlamps
99	Gas-Discharge Light Sources
100	Electric Power Train
101	Emission of Carbon Dioxide and Fuel Consumption (Passenger Car)
102	A Close-Coupling Device
103	Replacement Catalytic Converters
104	Retro-Reflective Markings for Heavy and Long Vehicles
105	The Carriage of Dangerous Goods with Regard to Their Specific Constructional Features
106	Tyres for Agricultural Vehicles
107	Category M2 or M3 Vehicles with Regard to Their General Construction, Construction of Double-Decker Buses
115	LPG/CNG Retrofit System
116	Protection of motor vehicle against unauthorized use
117	The Approval of Tyres with Regard to Rolling Sound Emissions
118	Fire Resistance of Interior Materials of Buses
119	Cornering lamp
120	Net power of tractor and non-road mobile machinery
121	The Location and Identification of Hand Controls, Tell-Tales and Indicators
122	Heating System
123	Adaptive Front-Lighting Systems (AFS)
124	Wheels for Passenger Cars
125	The Forward Field of Vision
126	Partitioning Systems
127	Pedestrian Safety
128	LED
129	Enhanced Child Restraint Systems (ECRS)
130	Lane Departure Warning Systems (LDWS)
131	Advanced Emergency Braking Systems (AEBS)
132	Retrofit Emission Control Devices
133	Recyclability of Motor Vehicles
134	Hydrogen and Fuel Cell Vehicles
135	Pole Side Impact
136	Two-Wheeled Electric Vehicles (category L)
137	Occupant Protection in Full-Lap Frontal Collision
138	Quiet Road Transport Vehicles (QRTV)
139	Brake Assist Systems (BAS)
140	Electronic Stability Control (ESC)
148	Light-signalling devices (lamps)
149	Road illumination devices (lamps) and systems
150	Retro-reflective devices and markings
151	Blind Spot Information System for the Detection of Bicycles(BSIS)
152	Advanced Emergency Braking System (AEBS)
153	fuel system integrity and safety of electric power train in the event of a rear-end collision
154	Criteria emissions, emissions of carbon dioxide and fuel consumption and/or the measurement of electric energy consumption and electric range (WLTP)
155	cyber security and of their cybersecurity management systems
156	software update and software updates management system
157	Automated Lane Keeping Systems (ALKS)
158	Awareness of Vulnerable Road Users Behind Vehicles When Reversing
159	Moving Off Information System for the Detection of Pedestrians and Cyclists
160	Event Data Recorder
161	Protection Against Unauthorized Use (Locking System)
162	Protection Against Unauthorized Use (Immobilizer)
163	Protection Against Unauthorized Use (Vehicle Alarm System)
164	Studded Tyres with Regard to Their Snow Performance
165	Reverse Warning
166	Vulnerable Road Users in Front and Side Close Proximity
167	Motor vehicles with Regard to Their Direct Vision

No.	NAME
	GTR
1	Doors locks and door retention Components
2	Measurement procedure for twowheeled motorcycles equipped with a positive or compression ignition engine with regard to the emission of gaseous pollutants, CO2 emissions and fuel consumption
3	Motorcycle brake systems
4	Test procedure for compression-ignition (C.I.) engines and positive-ignition (P.I.) engines fuelled with natural gas (NG) or liquefied petroleum gas (LPG) with regard to the emission of pollutants
5	Technical requirements for on-board diagnostic systems (OBD) for road vehicles
	echnical regulation concerning safety glazing aterials for motor vehicles
	ead restraints
	lectronic Stability Control
	edestrian safety
	ff-cycle emissions
	on-Road Mobil Machinery
	ocation, identification and operation of motorcycle ontrols, tell-tales and indicators
13	Hydrogen and fuel cell vehicles
14	Pole side impact
15	Worldwide harmonized Light vehicles Test Procedure
16	Tyres
17	Crankcase and evaporative emissions of L-category vehicles
18	On-Board Diagnostic (OBD) systems for L-category vehicles
19	EVAPorative emission test procedure for the Worldwide harmonized Light vehicle Test Procedure
20	Electric Vehicle Safety
21	Determination of Electrified Vehicle Power
22	Battery durability for electrified vehicles
23	Two and three wheeled vehicles equipped with a combustion engine with regard to durability of pollution-control devices
24	Laboratory Measurement of Brake Emissions for Light-Duty Vehicles

✓ **The UNR and GTR contain 167 and 24 rules respectively.**

✓ **Current regulations are revised and new ones enacted, as needed.**

UNR

https://unece.org/un-regulations-addenda-1958-agreement

GTR

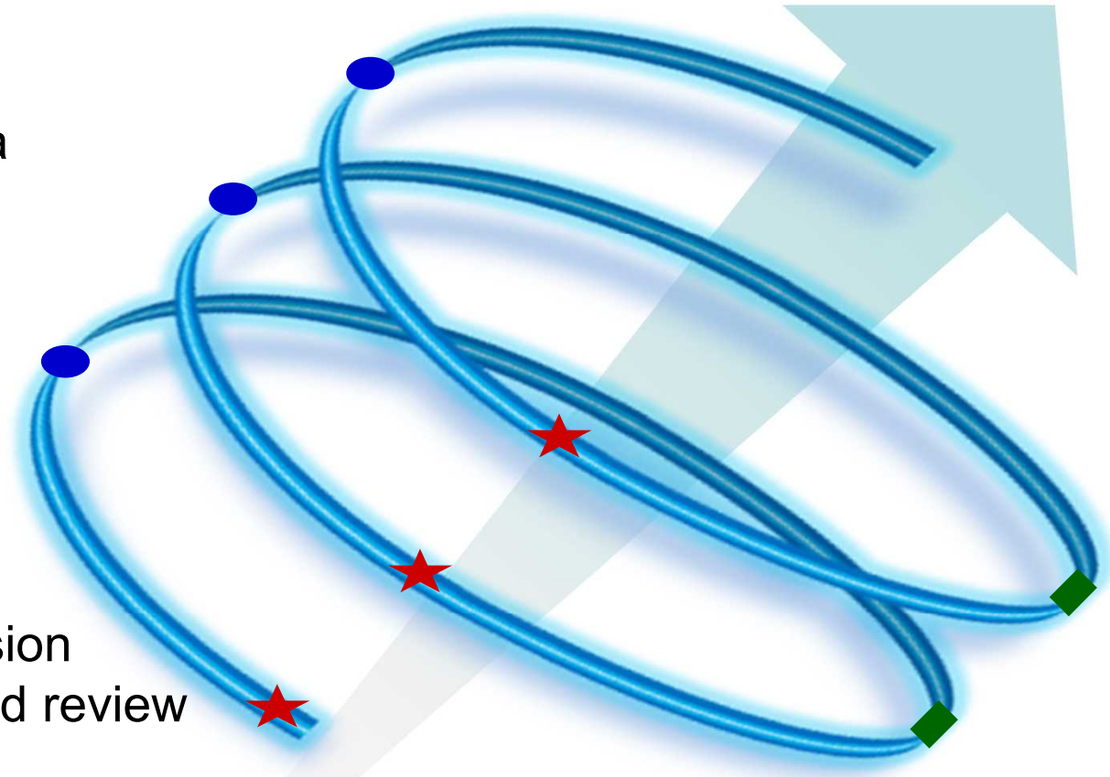
https://unece.org/transport/standards/transport/vehicle-regulations-wp29/global-technical-regulations-gtrs

Process for Developing UNR

- ✓ The discussion on WP.29 will be based on data-supported scientific evidence
- ✓ Each country will bring data for discussion
- ✓ Regulations in response to new challenges and technical advances are evolving

The discussion

- Discussion based on data
- Consensus building
- Establishment of rules



In review

- Technological advances
- New challenges

Test research

- Data collected for discussion
- Public/private analysis and review

The above cycle allows ready access to the latest information.

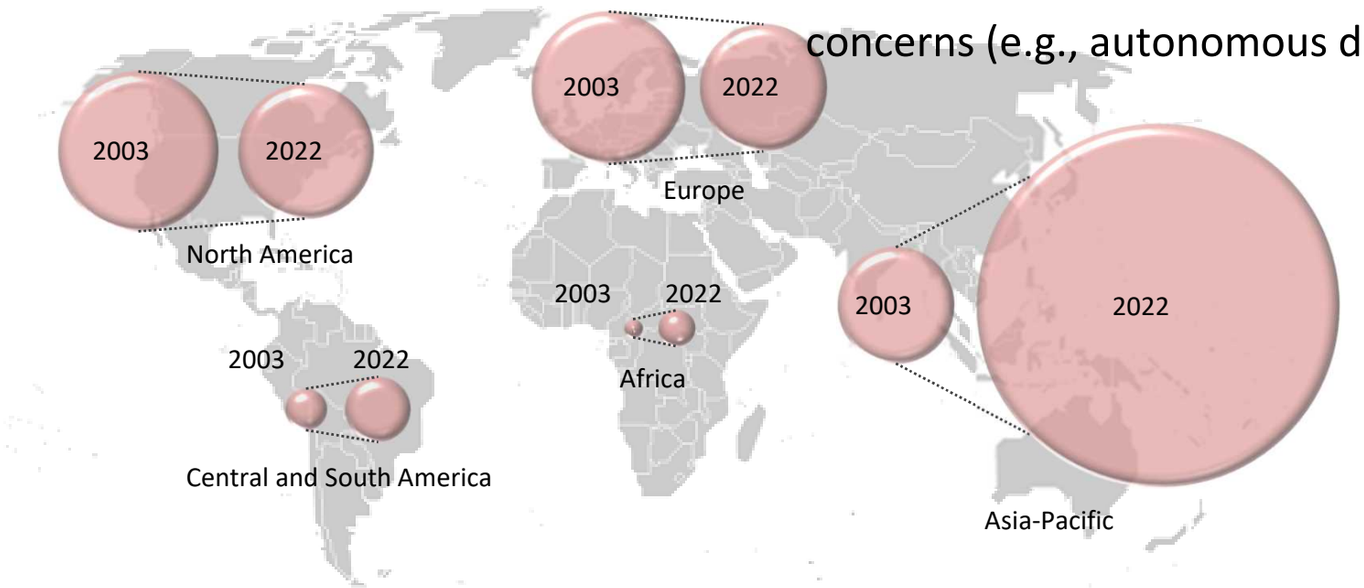
Direction of future in WP.29

Expanding the global reach of the conference

- ✓ The number of member countries is increasing
- ✓ There is a need for various perspectives on regional characteristics
- ✓ Importance of information from a “motorizing” Asia is increasing

Contributing to global traffic safety and carbon neutrality

- ✓ Reducing the number of traffic fatalities globally (which amounts to 1.3 million yearly), achieving carbon neutrality and other global common issues
- ✓ Evolving WP.29; a means by which knowledge from a global network that gathers together to address common concerns (e.g., autonomous driving and LCA)



Vehicle sales per region

WP.29: Main points of participation

- ✓ Participation in the agreement will impact stakeholders (i.e., auto manufactures, parts suppliers, importers, etc.)
- ✓ The process of achieving consensus for the sake of keeping smooth participation among these stakeholders involves listening to various opinions

Join an agreement

Discussion

- ✓ Regulations will be discussed among public and private sectors based on the following:
  - Necessity
  - Date of adoption
- ✓ Obtain consensus from all parties

Information collection /analysis

- ✓ Collect data through test research and statistical analysis
- ✓ Consider the adoption of rules based on the current situation in your country

The most important thing after becoming a member is participation in WP.29 discussions

Benefits of joining WP.29

Administration

- Increased efficiency of developing regulations
- Streamlined auditing process by extension of mutual recognition items
- Smoother international distribution of products

Automobile manufacturers

- Increased efficiency of development and production
- Parts made common across different models
- Increased efficiency of getting approvals by extension of mutual recognition items
- Increased efficiency of parts management

Consumers

- Spread of safer and more eco-friendly vehicles
- Lower vehicle prices
- Wider choice of imported vehicles

Growing Expectations for WP.29

- **WP.29 will play an increasingly important role to address global safety and environmental issues, while keeping pace with the rapid progress of automotive technology.**
- **WP.29 evolves into a more attractive forum for the international harmonization of vehicle regulations, and that the number of Contracting Parties to the 1958 and 1998 Agreements continues to increase.**

Thank you