AMERICAN AUTOMAKERS A A P C







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

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United Nations – Working Party 29 (WP29)

- Presentation
 - International Regulations, International agreements
 - Identification of International bodies
 - United Nations Working Party 29
 - Agreements, including 1998 Agreement & Benefits
 - Challenges



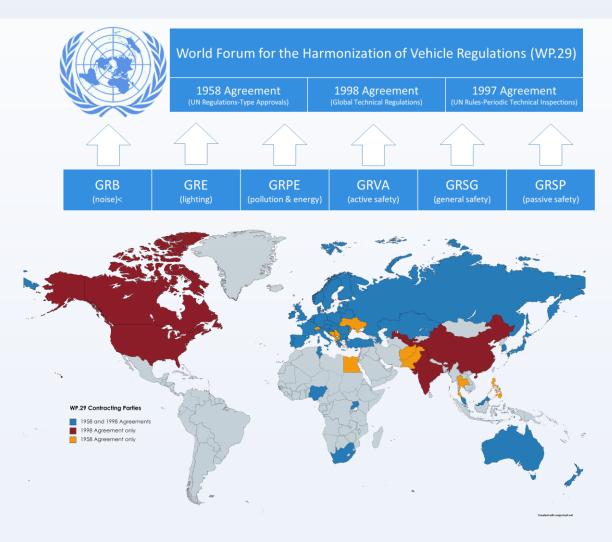
International Regulations

- Overview
 - Global Trade in vehicles has been growing exponentially for some time.
 - Different requirements in different markets added levels of complexity and cost for vehicle manufacturers
 - Unique requirements had the effect of limiting choice in some markets.
 - The 1980s saw various governments holding talks on the reduction of Technical Barriers to Trade
 - Most notable were the US UK Transatlantic business dialogues. (Pres. Ragan & PM Thatcher)
 - Various bodies were identified as peak standards/regulatory entities.
 - For Motor Vehicles the United Nations Working Party 29 was identified as the best option for harmonisation/harmonization of vehicle requirements for Safety, Environment and Anti-Theft.



World Forum (WP.29) Overview

- Two Agreements (+ third on inspections)
 - 1998 Agreement
 - Global Technical Regulations (GTR)
 - 1958 Agreement
 - UN Regulations for type approvals
 - System for mutual recognition of national approvals
- World Forum meets three times each year (66 countries across all Agreements)
 - Six specialized working parties meet 2-3 times each year
 - Expert groups work on defined issues



- 1958 Agreement
 - Agreement concerning the Adoption of Harmonized Technical United Nations Regulations 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 United Nations Regulations
 - Mutual Recognition Agreement (MRA) with Type Approvals
 - Clearly defined "Certification" process with both Type Approval and on-going Conformity of Production (CoP)
 - Obligations and responsibilities



- 1998 Agreement:
 - AGREEMENT CONCERNING THE ESTABLISHING OF GLOBAL TECHNICAL REGULATIONS FOR WHEELED VEHICLES, EQUIPMENT AND PARTS WHICH CAN BE FITTED AND/OR BE USED ON WHEELED VEHICLE
 - "HAVING DECIDED to adopt an Agreement to establish a process for promoting the
 development of global technical regulations ensuring high levels of safety,
 environmental protection, energy efficiency and anti-theft performance of Wheeled
 Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles;"
 - Global Technical Regulations (GTRs)
 - No Certification mode
 - No MRA
 - Most new GTRs have also been made in UN ECE Regulations under the 1958 Agreement.
 - MRA, Type Approval, etc.



- 1958 Agreement Contracting Parties 57 members but in reality, 30 members (counting the EU but not counting the 27 individual members of the EU, since the EU votes and acts as a block).
- 1998 Agreement Contracting Parties 38 members but in reality, 24 members (counting the EU but not counting the 14 individual members of the EU, since the EU votes and acts as a block)
- Note there is considerable overlap between the two agreements, but the 1998 agreement includes key large members not
 included in the 1958 agreement namely the USA, China and India.

Contracting Parties Status – Jan 2023





- 1998 Agreement:
 - The wide membership including CPs that are not members of the '58A.
 - It is widely recognized that all EV requirements are set under the '98A.
 - The '98A is purely about establishing the best safety requirements and assessment methods for worldwide use.
 - Most new GTRs are transposed to the '58A as UN ECE Regulations
 - Differing "levels of stringency" can be applied for different markets/regions



- 1998 Agreement:
 - Unlike the '58A, the '98A does not involve participation in an international system where each country must accept approvals granted by other countries as established by WP.29 in Geneva.
 - Global Technical Regulations (GTRs) are state-of-the-art regulations that enable governments to establish national regulations.
 - The '98A does not come with the administrative requirements and obligations for accepting approvals found in the 1958 Agreement.



WP.29 EV programs

- Electric Vehicle Safety
 - GTR 20 (electric vehicle safety)
- Electric Vehicles and the Environment
 - GTR 21 (EV power determination)
 - GTR 22 (EV battery durability)
 - Heavy-duty vehicle battery durability
- GTR 13-Phase 2
 - GTR 13 (hydrogen fuel-cell vehicle safety)
- GTR into UN Regulations
 - UN R100 (battery electric power trains)
 - UN R153 (fuel/electric system safety)
 - Crash test regulations (R94/95/135/137)

Global Shift to Electric Power

1998 Agreement designed for global collaboration

(irrespective of regulatory system)

GTR provisions transposed into UN Regulations for type-approval systems

GTR 13 (2013)

GTR 20 (2018)

GTR 21 (2021)

GTR 22 (2022)

HD EV battery durability (est. March 2025)



Working Party 29 (WP29) – GRVA

Working Party on Automated/Autonomous and Connected Vehicles



 GRVA is the Working Party preparing draft regulations, guidance documents and interpretation documents for adoption by the parent body, WP.29. GRVA deals with safety provisions related to the dynamics of vehicles (braking, steering), Advanced Driver Assistance Systems, Automated Driving Systems and well as Cyber Security provisions. The group supervises around 8 informal work groups (IWGs) and tasks forces.



- 1998 Agreement for ASEAN
 - ASEAN accounts for a substantial market in a diverse region with contrasting vehicle environments and usage.
 - Input from the ASEAN region could play a significant role in global requirements.
 - GTRs may have levels of stringency for each region/CP.
 - Provide unique market/regional input to be considered at the time the GTR is being developed.
 - Allows for the best level of application of regulation for each ASEAN member.
 - Provides a level of certainly to both Government and Industry knowing the requirements being considered have unique ASEAN input and will be fit for purpose.



Working Party 29 (WP29) – Challenges

- Life Cycle Carbon Assessment
 - Global consistency in the methodology, will be vital
- Access to in vehicle data
 - The rise of the connected vehicle means significant debate about what data has to be made available.
 - Impact is extremely wide.
 - Cyber security, Self Testing?
- Batteries and ELV recycling requirements
 - Circular economy policies



• End

• Questions will be answered at the end of the session as per the moderator's request.

