

Advancing
Free Trade for Asia-Pacific
Prosperity

WP.29 & International AV Fora Update

Virtual APEC Automotive Dialogue 32 28 August 2020

Presented by

U.S. Delegation - American Automotive Policy Council

WP.29 Background





- Gathers automotive regulators, industry, and other stakeholders from around the world
 - Usually meets in March, June, and November
- Develops regulatory requirements for safety and environmental performance
 - UN Global Technical Regulations (GTR) establish test procedures and performance requirements for use worldwide
 - UN Regulations establish uniform provisions for internationally recognized type approvals of vehicles and components
- GTR and UN Regulations provide basis for national/regional legislation

International Agreements under WP.29

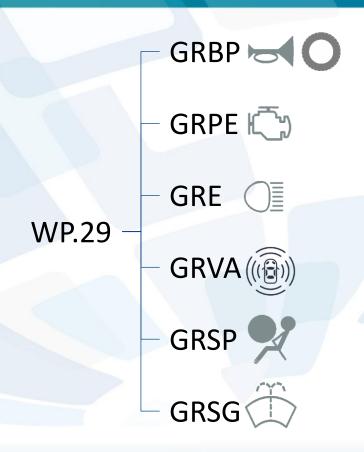


- Two main agreements
 - 1958 Agreement: Centered around adoption of UNECE standards and type approval protocols – therefore, it does not include self-certification economies as "Contracting Parties", nor is China a Contracting Party to the 1958 Agreement.
 - 1998 Agreement: Structured to include more Contracting Parties, including the U.S., EU, China, etc., it establishes a system for adopting automotive standards by either harmonizing existing standards or developing new ones through GTRs.
- Most economies are Contracting Parties to both agreements.
- 1998 Agreement only economies:
 - North America (self-certification)
 - China, India, Uzbekistan

WP.29 Permanent Working Parties

ASIA-Pacific Economic Cooperation

(aka GR)



- Working Parties provide technical oversight and expertise for development of regulations
 - GRBP: Noise and Tires
 - GRPE: Engine, Emissions, Energy
 - GRE: Lighting and Light-Signaling
 - GRVA: Automated/Autonomous and Connected Vehicles
 - GRSP: Passive Safety
 - GRSG: General Safety Construction
- WP.29 provides policy oversight and formal decisions
 - Regulatory proposals officially approved or rejected

Working Party on Automated/Autonomous and Connected Vehicles



GRVA

Chair: Germany
Vice Chairs: Japan, China

IWG on Validation Methods for Automated Driving (VMAD) Co-Chairs: Canada, Japan, Netherlands

IWG on Functional Requirements for Automated Vehicles (FRAV) Co-Chairs: U.S, China, Germany IWG on Data Storage Systems for Automated Driving/Event Data Recorders (DSSAD/EDR) Co-Chairs: U.S., Japan, Netherlands Over-the-Air Software
Updates (CS/OTA)
Co-Chairs: U.S., UK, Japan

- GRVA oversees steering and braking (vehicle control) issues
- Special mission to address vehicle automation safety
- Internal working groups(IWGs) formed by experts to address challenges of automated driving regulation

AMERICAN AUTOMAKERS

AAPC

WP.29: Recent AV Actions



- COVID-related public health and travel restrictions have led to limited remote sessions over the past 6 months
- June WP.29 session saw adoption of three AV-related regulations
 - UN R155 on type approval of vehicles with regard to cybersecurity and cybersecurity management systems
 - UN R156 on type approval of vehicles with regard to software updates and software update management systems
 - UN R157 on type approval of vehicles with regard to automated lane-keeping systems (ALKS)
 - UN R155 and R156 extend type approval to lifetime management of cybersecurity and software
- UN R157 concerns SAE Level 3/4 on-highway ALKS operating at speeds up to 60 km/h (e.g., traffic jam pilot)

WP.29: Coming through the Pipeline



- New GTR on crash event data recorders (EDR) in November
 - Updated version of NHTSA Part 563 modified for global use
 - Longer-term phase 2 expansion to consider data from non-airbag systems (e.g., ADAS, pedestrian protection systems)
- Proposal to expand UN R157 (ALKS) to 130 km/h
- Data Storage Systems for Automated Driving (2021)
 - Address user interactions with ADS and product liability issues
- New Assessment/Test Method (NATM)
 - Substantially new approach to ADS safety assessments
 - Architecture for methods and requirements expected March 2021



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Thank you!