10th Public and Private joint Forum in Asian Region
Kuala Lumpur
4 – 5 December 2019

World Forum for Harmonization of Vehicle Regulations, WP.29

Recent developments

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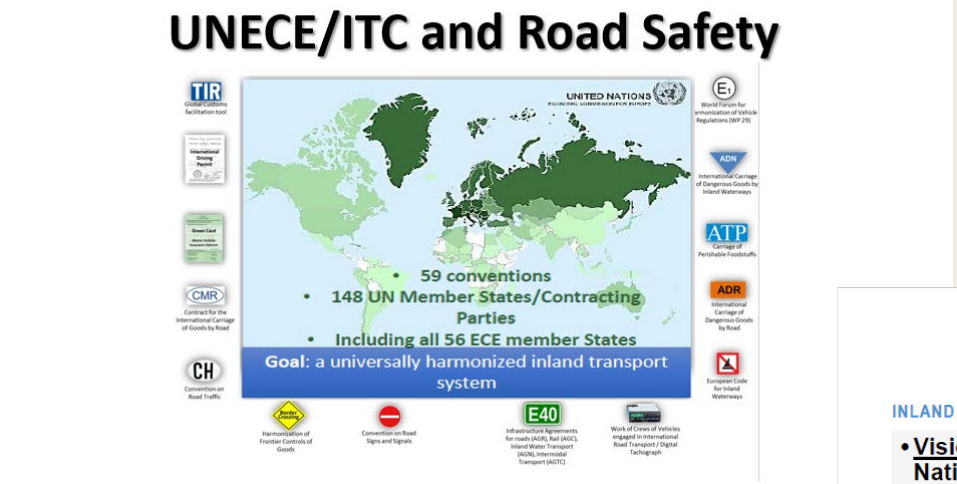
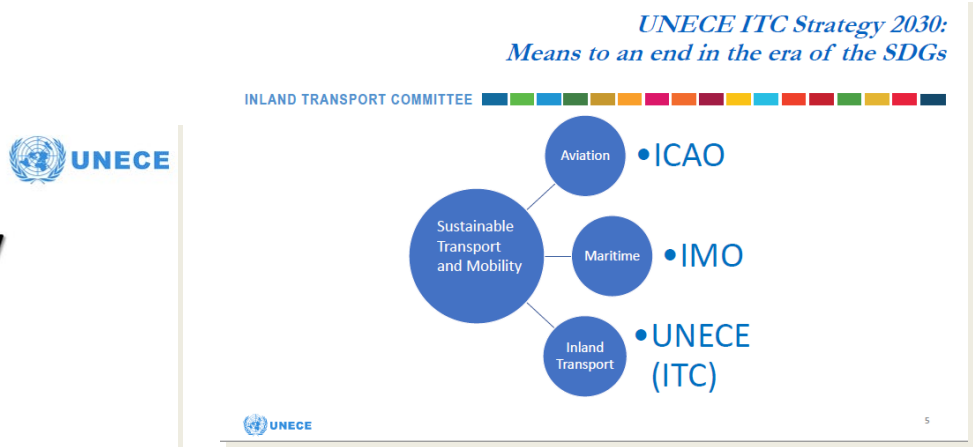
New role for ITC





New format of WP.29

WP.29 proper session from Tuesday afternoon until Thursday

Day	Time	Agenda item(s)	Comment
Monday	14:30 – 17:30	AC.2 (preparatory meeting)	For members only
Tuesday	09:00 – 13:00	AC.2	For members only
	14:30 – 17:30	1 – 2.2, 3 – 4.5	3.6 highlights of recent sessions in form of short ppt.
Wednesday	09:30 – 10:30	2.3.	
	10:30 – 11:00	4.6. – 4.17.	
	11:30 – 12:00	7	
	12:00 – 12:30	AC.1 and AC.4	AC.4 depending on recommendation by AC.2
	14:30 – 17:30	AC.3	
Thursday	09:30 – 12:30	8 and presentations	
	14:30 – 16:00	IWG on ITS/PTI/Enforcement	
	16:30 – 17:30	9	
Friday	09:30 – 12:30	Side events: e.g. Workshop "Implementation of 1958/1998 Agreement«, or	Exchange of best practice between experienced and new Contracting Parties
	14:30 – 16:00	Workshop "Implementation of 1997 Agreement"	

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WP.29 and automated/autonomous vehicles

- specific working party GRVA
- Framework document
  - AVs as of L3,
  - safety vision,
  - common principles,
  - priorities and work plan
- Clustering of work
  - IWG on functional requirements (FRAV),
  - IWG on validation methods (VMAD),
  - IWG on EDR/DSSAD,
  - IWG on Cyber/OTA

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.

WP.29 and SDGs

UN and Road Safety

UN decade of action for road safety 2011-2020

The plan

The 5 pillars

x x

UN Road Safety Trust Fund

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UN Secretary General's Special Envoy on Road Safety

- United Nations Secretary-General Ban Ki-moon announced on 29 April 2015 the appointment of Jean Todt as his Special Envoy for Road Safety.
- to help mobilize sustained political commitment at the global level towards making road safety a priority worldwide
- UNECE, which is the custodian of the UN road safety legal instruments, will act as the secretariat for the Special Envoy.

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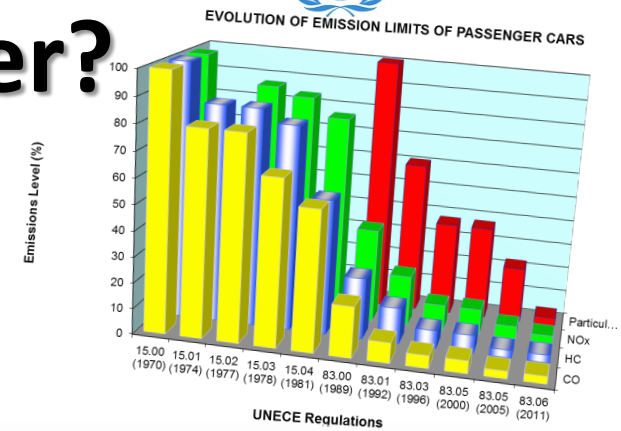
Global Framework Plan of Action for Road Safety

➔ Includes Safe vehicles

Pillar \ Area	Legislation	Enforcement	Education	Technology	International Regulatory Support
Road safety management					
Safe user	Traffic rules drivers pedestrians	Lawful behavior ensured by police and inspectors	Awareness raising, training and examination	Supportive technology and equipment, rules reminders	UN RS legal instruments and resolu-tions, WP.1, SC.1, WP.15
Safe vehicle	Rules and standards for admission of vehicles to traffic	Certification and inspections by qualified inspectors	Awareness raising for users, training for inspectors	Supportive technology and equipment, compliance reminders	UN RS legal instruments and resolu-tions, WP.1, WP.29
Safe road	Standards for design, construction, maintenance and signage	Audit and inspection by qualified inspectors	Awareness raising for users, training for inspectors	Forgiving road design, intelligent road systems	UN RS legal in-struments and resolutions, int. standards WP.1, SC.1
Effective post-crash response	Standards for post-crash response and for crash investigation	Oversight of rescue services, investigators investigating crashes	First aid and rescue service training, investigators training	Supportive technology and equipment	Consolidated resolution, int. standards, WP.1, SC.1

- Stems from the Global Plan for the Decade of Action for Road Safety:
  - five pillars for road safety as the essential blocks for creating sound national road safety systems
  - safe system approach
- Is specific on (interconnected) actions across areas to be taken by different actors

Why does it matter?



Why vehicle regulations (new vehicles) ?

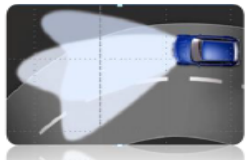
Several versions of a given model are built, because:

- Left Hand Drive
- Right Hand Drive
- The US/Canada version
- The Rest of the World (e.g. for countries with low fuel quality)…

Same type
Same model
Same brut price

Different safety depending on national legal requirements (no airbags, lower quality material, less welding points, fewer structure components, etc…)

The most important UN Vehicle Regulations to make a change to road safety

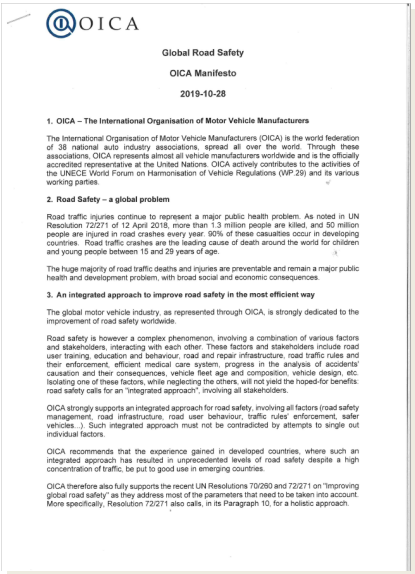


Topic	Passenger cars	PTWs	Commercial vehicles
	UN Regulation	UN Regulation	UN Regulation
Active safety			
Brakes	R13 H (incl. ABS)	R 78 (incl. ABS) GTR 3	R 13 (incl. EVSC)
Electronic Stability Control	R 140 GTR 8		
Steering	R 79		R 79
Tyres	R 30/ GTR 16	R75	R 54
Mechanical couplings			R 55
Passive safety			
Helmets		R22	
Safety belts anchorages	R 14		R 14
Safety belts	R 16		R 16
Seats/ head restraints	R 17, R 25/ GTR 7		
Frontal collision	R 94		
Lateral collision/ pole side impact	R 95, R 135/ GTR 14		
Pedestrian safety	R 127/ GTR 9		
Child restraints	R 44		
Electric PTW safety		R 136	
Cabs strength			R 29
General safety			
Buses and coaches			R 107
Safety glazing	R 43/ GTR 6		R 43
Devices for indirect vision			R 46
Underrun protection			R 58 R 93
Lighting and light installation			
Installation of lighting	R 48	R 53, R 74	R 48

Initiative by UNECE and Special Envoy for Road Safety

Negotiations with automotive industry towards a voluntary commitment to only produce vehicles complying with minimum set of safety

OICA Manifesto



@OICA

Global Road Safety

OICA Manifesto

2019-10-28

1. OICA – The International Organisation of Motor Vehicle Manufacturers

The International Organisation of Motor Vehicle Manufacturers (OICA) is the world federation of 38 national auto industry associations, spread all over the world. Through these associations, OICA represents almost all vehicle manufacturers worldwide and is the officially accredited representative at the United Nations. OICA actively contributes to the activities of the UNECE World Forum on Harmonisation of Vehicle Regulations (WP.29) and its various working parties.

2. Road Safety – a global problem

Road traffic injuries continue to represent a major public health problem. As noted in UN Resolution 72/271 of 12 April 2018, more than 1.3 million people are killed, and 50 million people are injured in road crashes every year. 90% of these casualties occur in developing countries. Road traffic crashes are the leading cause of death around the world for children and young people between 15 and 29 years of age.

The huge majority of road traffic deaths and injuries are preventable and remain a major public health and development problem, with broad social and economic consequences.

3. An integrated approach to improve road safety in the most efficient way

The global motor vehicle industry, as represented through OICA, is strongly dedicated to the improvement of road safety worldwide.

Road safety is however a complex phenomenon, involving a combination of various factors and stakeholders, interacting with each other. These factors and stakeholders include road user training, education and behaviour, road and repair infrastructure, road traffic rules and their enforcement, efficient medical care system, progress in the analysis of accidents' causation and their consequences, vehicle fleet age and composition, vehicle design, etc. Isolating one of these factors, while neglecting the others, will not yield the hoped-for benefits: road safety calls for an "integrated approach", involving all stakeholders.

OICA strongly supports an integrated approach for road safety, involving all factors (road safety management, road infrastructure, road user behaviour, traffic rules' enforcement, safer vehicles...). Such integrated approach must not be contradicted by attempts to single out individual factors.

OICA recommends that the experience gained in developed countries, where such an integrated approach has resulted in unprecedented levels of road safety despite a high concentration of traffic, be put to good use in emerging countries.

OICA therefore also fully supports the recent UN Resolutions 70/260 and 72/271 on "Improving global road safety" as they address most of the parameters that need to be taken into account. More specifically, Resolution 72/271 also calls, in its Paragraph 10, for a holistic approach.

- The global motor vehicle industry, as represented through OICA, is strongly dedicated to the improvement of road safety worldwide.
- OICA strongly supports an integrated approach for road safety
- OICA called on all governments worldwide to place all actors in the auto industry on an equal competitive footing by setting compulsory minimum vehicle safety performance requirements for all new vehicles sold on their territory
- Direct responsibility of vehicle manufacturers rests with vehicle design and performance, and OICA therefore supports the necessity to lay down the necessary legislation in various regions
- OICA cautions against so called "cherry-picking", a practice where certain requirements are selected from different regulatory regimes.

I. Light vehicles (passenger cars, light duty vehicles – for definitions, see UN Consolidated Resolution R.E.3, FMVSS standards, …)

Subject	Requirement	Leadtime for implementation (in months after promulgation of the law)	Explanation
Brakes incl. ABS installation	R 13H.00 FMVSS 135 or other well-established requirements are to be considered as equivalent. In addition, installation of ABS, as specified e.g. in Annex 6 to UN R13H.00	36 Months	ABS installation is currently not mandated by UN R13H or FMVSS 135. The installation of ABS should therefore be a separate, additional requirement that the auto industry can fully accept.
ESC, including its installation	UN R 140.00, GTR 8, Supplement 7 to UN R13H. In addition, installation of ESC needs to an additional separate requirement. FMVSS 126 or other well-established requirements are to be considered as equivalent.	60 Months	ESC installation is, strictly speaking, currently not mandated by UN R140, even though the technical specifications are included. The installation of ESC should therefore be a separate, additional requirement that the auto industry can fully accept. FMVSS 126 however foresees mandatory installation Also Supplement 7 to UN R13H needs to be added as equivalent alternative since this originally contained the ESC specifications which are still valid.
Safety belt anchorages	Level of UN R14.05 for all seats, except for the centre rear seat, where 2 lower anchorage points should remain allowed (3rd, upper point would remain optional). FMVSS 210 or other well-established requirements are to be considered as equivalent	24 Months	The main problem relates to the number of belt anchorages on the centre rear seat. Some vehicles produced locally in emerging markets still have only 2 anchorage points on the rear centre seat (compatible with a 2-point lap belt) and requiring 3 anchorages points would entail serious structural adaptation, and therefore longer time. There are also administrative issues, since official approval to UN R14.05 cannot be obtained anymore unless 3 anchorage points are installed.
Safety belts	Level of UN R16.04 for all seats, except for the centre rear seat where 2-point lap belts should remain allowed (3-point belts are obviously allowed). FMVSS 209 or other well-established requirements are to be considered as equivalent.	36 Months	As for the number of anchorage points, the main problem relates to the type of seat belt on the centre rear seat. Some vehicles produced locally in emerging markets still have only 2 anchorage points on the rear centre seat and therefore can only be equipped with a 2-point lap belt on that seat. There are also administrative issues, since official approval to UN R16.04 cannot be obtained anymore unless 3-point seat belts are installed on all seats. OICA therefore suggests for the time being that the legal requirements foresee the level of UN R16.04 for all seat belts (e.g. based on a test report), while 2-point lap belts on the centre rear seat remain allowed for some more time in case only 2 lower anchorage points are foreseen. The complete switch to UN R16.04 (or equivalent or even higher versions) could occur at a somewhat later stage, to be reviewed locally.
Seats/Head restraints	UN R 17.07, GTR 7. FMVSS 202 or other well-established requirements are to be considered as equivalent	36 Months	
Frontal collision	UN R94.01 FMVSS 208 or other well-established requirements are to be considered as equivalent	36 Months	
Lateral collision	UN R95.02 FMVSS 214 or other well-established requirements are to be considered as equivalent.	36 Months	
Tyres	Vehicles put on sale should be fitted with certified tires, as per UN R 30.02, UN R54, or meeting GTR 16 FMVSS 139, FMVSS 109 or other well-established requirements are to be considered as equivalent	12 Months	It should be clear that this is only for tyres as fitted on the vehicle put on sale. OEMs cannot be held responsible for the aftermarket. In addition, UN R30 or UN R54 do not cover installation. The requirement should therefore be spelled out as requiring vehicles put on sale to be fitted with certified tires. UN R30 and UN R54 are not restricted to specific vehicle categories: a heavy passenger car can use truck tires and the other way around a light van can use car tires. UN R30 or UN R54 should therefore be considered as interchangeable.
Safety glazing	UN R43.00 FMVSS 205 or other well-established requirements are to be considered as equivalent.	24 Months	
Installation of lighting	UN R48.03 FMVSS 108 or other well-established requirements are to be considered as equivalent.	36 Months	

Thank you

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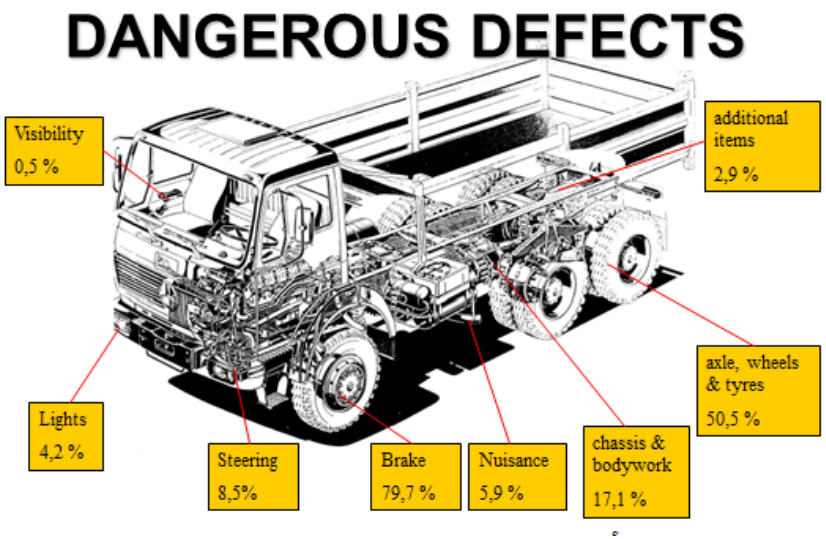
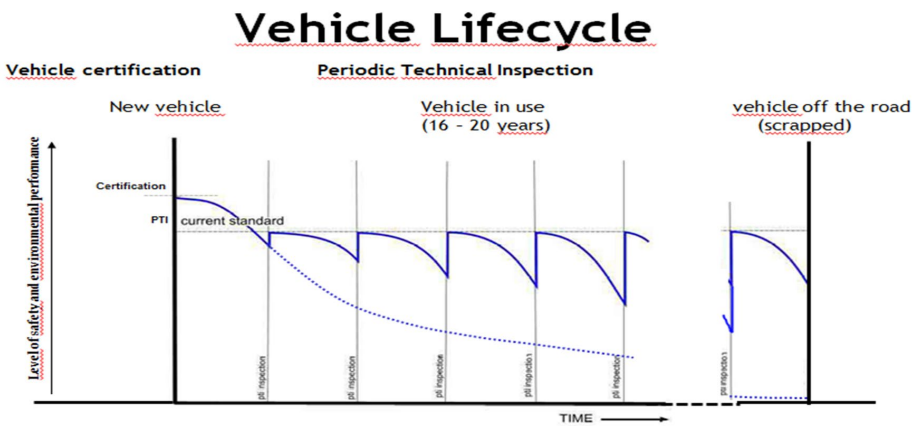
Why does it matter?

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
  - Towards continuous compliance

Example of results of technical roadside inspections (Austria ´08)





Principal Elements of the 1997 Agreement

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

1997 Agreement

- UN Rule No. 1 — For environmental issues
- UN Rule No. 2 — For safety inspection
- UN Rule No. 3 — LNG/LGP/CNG fueled vehicles
- UN Rule No. 4 — EV and HEV vehicles

With the latest amendments to the 1997 Agreement and the new UN Rule Nos. 3 & 4

1997 Agreement is the global lead legislation for PTI