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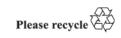
Revised programme of Work of the World Forum for Harmonization of Vehicle Regulations (WP.29) and its Subsidiary Bodies

Note by the Secretariat*

The text reproduced below was prepared by the Secretariat for consideration by the World Forum. It takes into account the results and decisions taken at 178th session (ECE/TRANS/WP.29/1147) and its 179th session (ECE/TRANS/WP.29/1149) and the proposed agenda for its 180th session (ECE/TRANS/WP.29/1150) and updates also the information on the work of the six subsidiary Working Parties to WP.29.

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^{*} In accordance with the programme of work of the Inland Transport Committee for 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

Programme of Work of the World Forum for Harmonization of Vehicle Regulations and its Subsidiary Bodies

Main topics of work of the World Forum for Harmonization of Vehicle Regulations and its subsidiary bodies

The Inland Transport Committee (ITC), at its eighty-first annual session in 2019 adopted the ITC Strategy until 2030, invited its subsidiary bodies to take follow-up actions aligning their work with the strategy. In June 2019, the ITC Chair invited all Chairs of Working Parties or Administrative Committees to support in the implementation of the ITC Strategy by proposing a concrete plan aligning the work of their Working Party or Administrative Committee with the ITC strategy.

For the implementation of the ITC strategy ITC identified that, apart from the regular work, the subsidiary bodies need to undertake the following tasks in the Strategy (only those relevant to WP.29 are displayed):

- (a) Amendments to the legal instruments with geographical and procedural barriers by 2025 (all WPs/SCs and ACs)
- (b) Review of relationship of the existing legal instruments and recommendations by 2022 (all WPs/SCs and ACs to review the legal instruments in the context of different clusters, namely safety, cross-border efficiency, environment and connectivity)
- (c) Identification of additional necessary legal instruments (Based on the review, all WPs/SCs and ACs to identify gaps of the legal instruments fully meet the needs for safety, cross-border efficiency, environment and connectivity)

. . .

- (e) Exploring possible new legal instruments from 2020 (all WPs/SCs and ACs based on the above item c)
- (f) Further expand global participation in, and cooperation between, WP.1 and WP.29
 - (g) Update DETA and host it at ECE from 2022 onwards (WP.29)

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- (j) Identify, foster and facilitate the introduction of new technologies in the rail, road, road-based mobility, inland waterway, logistics, intermodal transport until 2030 (all WPs/SCs and ACs)
- (k) Enhance support to automated vehicles from 2019, including continuation of amendments to the existing legal instruments and standards, and possible development of new agreement(s), both if necessary (WP.1 and WP.29)
- (l) New training standards and competency criteria from 2022 (all WPs/SCs and ACs with legal instruments)

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(q) New tools and activities from 2019, e.g. - THE PEP; further development of local pollutant module of ForFITS; reviews on green transport and mobility (WP. 5, WP.29)

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In conclusion, the top priorities for the work of the World Forum for Harmonization of Vehicle Regulations lie in the field of automated vehicles paving the way for a regulatory framework supporting the introduction of these emerging technologies towards future autonomous vehicles and in environmental protection and climate change mitigation. A detailed list of UN Regulations, UN GTRs, UN Rules and Resolutions for discussion at the upcoming sessions of WP.29 is shown in Table 1.

1. Further development and implementation of the three Vehicle Agreements

- 1.1. **1958 Agreement**: Following the adoption and entry into force of Revision 3 of the 1958 Agreement on 14 September 2017, the requirements for International Whole Vehicle Type Approval (IWVTA) are to be further developed within UN Regulation No. 0. and DETA to be established.
- 1.2. **1997 Agreement**: Amendments to the agreement entered into force on 13 November 2019 introducing elements related to the performance and quality of periodic technical inspections. These endeavours were underpinned by resolution R.E.6 covering skills and training for inspectors, requirements for testing equipment and supervision of test centres. Two additional rules were established covering vehicles with gaseous fuels and electric or Hybrid electric propulsion systems. Access to information necessary for performance of periodic technical inspection of modern vehicles needs to be addressed.
- 1.3. **1998 Agreement**: Following the establishment of Special resolution S.R.3, the implementation of the agreement will be followed with a more strategic approach by identifying key elements that define elements the work will focus on.

2. Horizontal activities

2.1. Performance requirements outside test conditions (ECE/TRANS/WP.29/1126, para. 21) and whole life compliance are elements to be considered in all areas of work both in WP.29 and in all GRs.

3. Main topics of the Subsidiary Bodies

- 3.1. At the 178th and179th session of WP.29, all GRs were invited to perform a review of their activities and to identify priorities of their work. The outcome of this review provided the basis for the establishment of the Programme of Work of the World Forum for Harmonization of Vehicle Regulations (WP.29) and its Subsidiary Bodies for the year 2020 and beyond (ECE/TRANS/WP.29/1145, para. 7 and ECE/TRANS/WP.29/1149, para.). As main priorities of work for 2020 the GRs identified:
- 3.1.1. GRBP main topics are the work on real driving Additional Sound Emission provision (ASEP) for Quiet Road Transport Vehicles (QRTV), Reverse Warning System (RWS), revision of sound limit values, sound measurement uncertainties as well as wet grip for tyres in a worn state. A detailed list of activities of GRBP is presented in Table 2.
- 3.1.2. GRE is continuing the work on simplification of the lighting regulations following the establishment of the UN Regulations Nos. 148,149 and 150 as well as Resolution R.E.5 on the common specification of light source categories. Once the first stage of simplification is finalized, in the second stage GRE will focus on introducing technology neutral requirements, also taking into account work to avoid glare and to ensure good visibility for dipped beam headlamps. A detailed list of activities of GRE is presented in Table 3.
- 3.1.3. GRPE main area of work is related to a new UN GTR and a new UN Regulation on Global Real Driving Emissions (GRDE), Determination of Electrified Vehicle Power (DEVP), in-vehicle battery durability, sub-23 nm exhaust particles and particulates stemming from brake emissions. A detailed list of activities of GRPE is presented in Table 4.
- 3.1.4. GRVA is establishing further elements for the UN vehicle regulatory framework towards automated driving. This includes Functional Requirements for automated / autonomous vehicles, New assessment / Test methods, Cyber security and (Over-the-Air) Software updates and Data Storage System for Automated Driving vehicles (DSSAD). A detailed list of activities of GRVA is presented in Table 5.
- 3.1.5. GRSG work will focus on Event Data Recorder (EDR) with a new UN Regulation and UN GTR, on augmented reality in the driver's field of vision and vehicle connectivity elements related to virtual keys. A detailed list of activities of GRSG is presented in Table 6.
- 3.1.6. GRSP focuses its work on a UN Regulation for transposition of UN GTR No.20 for electric vehicle safety as well as on transposition of UN GTR No. 7 on head restraints into UN Regulation No.17, update of UN crash regulations and on child restraint systems. A detailed list of activities of GRSP is presented in Table 7.

Table 1 Subjects under consideration by the World Forum (WP.29) Document symbol Documentation ECE/TRANS/WP.29/... Subject availability 0. **Intelligent Transport Systems (ITS)** 1.0. **Automated/Autonomous Driving** 1.0.1. Framework document on automated/autonomous vehicles. 1.0.2. Functional Requirements for automated / autonomous vehicles 1.0.3. New assessment / Test method 1.0.4. Cyber security and (Over-the-Air) Software updates 1.0.5. Event Data Recorder (EDR) 1.0.6. Data Storage System for Automated Driving vehicles (DSSAD) 1.1. 1958 Agreement For document symbols and its availability, please refer to the agenda (1150)1.1.1 Draft amendments to existing UN Regulations to be considered at the June 2020 session UN Regulations Nos.: (Noise of three-wheeled vehicles) 10 (Electromagnetic compatibility) (External projections of passenger 26 28 (Audible warning devices) (Devices for indirect vision) 46 48 (Installation of lighting and lightsignalling devices) 51 (Noise of M and N categories of vehicles) 55 (Mechanical couplings) 58 (Rear underrun protection devices) 59 (Replacement silencing systems) 62 (Anti-theft (mopeds/motorcycles)) 79 (Steering equipment) 90 (Replacement braking parts) 106 (Tyres for agricultural vehicles) 107 (M₂ and M₃ vehicles) 110 (CNG and LNG vehicles)117 (Tyre

rolling resistance, rolling noise and

121 (Identification of controls, tell-tales

wet grip)

and indicators)

Subject			Document symbol ECE/TRANS/WP.29/	Documentation availability
	122	(Heating systems)		
	128	(LED light sources)		
	144	(Accident Emergency Call Systems)		
	148	(LSD)		
	149	(RID)		
	150	(RRD)		
	151	(Blind Spot Information Systems (BISIS))		
	152	(AEBS for M_1 and $N1$)		
1.1.1.	-	oosal for new UN Regulations to be idered at the March 2020 session		
	Nil			
	UN	it amendments to existing Regulations to be idered at the June 2020 ion	(1152)	
	UN	Regulations Nos.:		
	9	(Noise of three-wheeled vehicles)		
	10	(Electromagnetic compatibility)		
	26	(External projections of passenger cars)		
	28	(Audible warning devices)		
	46	(Devices for indirect vision)		
	48	(Installation of lighting and light- signalling devices)		
	51	(Noise of M and N categories of vehicles)		
	55	(Mechanical couplings)		
	58	(Rear underrun protection devices)		
	59	(Replacement silencing systems)		
	62	(Anti-theft (mopeds/motorcycles))		
	79	(Steering equipment)		
	90	(Replacement braking parts)		
	106	(Tyres for agricultural vehicles)		
	107	(M ₂ and M ₃ vehicles)		
	110	(CNG and LNG vehicles)117 (Tyre rolling resistance, rolling noise and wet grip)		
	121	(Identification of controls, tell-tales and indicators)		
	122	(Heating systems)		
	128	(LED light sources)		

144 (Accident Emergency Call Systems)

Subject		Document symbol ECE/TRANS/WP.29/	Documentation availability	
	148(LSD)			
	149 (RID)			
	150 (RRD)			
	151 (Blind Spot Information Systems (BISIS))			
	152 (AEBS for M_1 and N_1)			
1.1.2.	Proposal for new UN Regulations to be considered at the June 2020 session	(1152)		
	Nil			
1.1.3.	Status of the Agreement and of the annexed UN Regulations, including the latest situation report	343/Rev.28		
1.1.4.	Development of an International Whole Vehicle Type Approval (IWVTA) system,			
1.1.5.	Consideration of amendments to the 1958 Agreement.			
1.1.6.	Development of an electronic database for the exchange of type approval documentation (DETA)			
1.2.	1998 Agreement (Global)	For document symbol		
1.2.1.	Consideration of draft UN GTRs and amendments to them to be considered at the March 2020 session	availability, please refer to the agend (1150)		
	UN GTR Nos.:			
	3 (Motorcycle braking)			
	6 (Safety glazing)			
	16 (Tyres)			
1.2.2.	Consideration of Mutual Resolutions			
	Consideration of draft amendments to Mutual Resolution No. 1 (M.R.1)			
	Nil			
	Consideration of draft amendments to Mutual Resolution No. 2 (M.R.2)			
	Nil.			
	Consideration of new Mutual Resolutions			
	Nil			
1.2.3.	Guidance for the development of UN GTRs:			
	Nil			
1.2.4.	Progress on the development of new UN GTRs and of amendments to established UN GTRs			
1.2.5.	Consideration of draft UN GTRs and amendments to them to be considered at the June 2020 session	(1152)		

Subject Document symbol Documentation
Subject ECE/TRANS/WP.29/... availability

UN GTR Nos.:

- 6 (Safety glazing)
- 16 (Tyres)
- 1.2.6. Consideration of new Mutual Resolutions
- 1.2.7. Guidance for the development of UN GTRs:

Nil

- 1.2.8. Progress on the development of new UN GTRs and of amendments to established UN GTRs
 - 1 (Doors locks and door retention components)
 - 2 (Worldwide Motorcycle emission Test Cycle (WMTC))
 - 3 (Motorcycle braking)
 - 4 (Worldwide Heavy-Duty vehicle emission test Cycle (WHDC))
 - 5 (On-Board Diagnostic Systems (OBD))
 - 6 (Safety glazing)
 - 7 (Head restraints)
 - 8 (Electronic stability control systems (ESC))
 - 9 (Pedestrian safety)
 - 10 (Off-cycle emissions (OCE))
 - 11 (Agricultural and forestry tractors and non-road mobile machinery emission test procedures)
 - 12 (Motorcycle Controls, Tell-tales and Indicators)
 - 13 (Hydrogen and Fuel Cell Vehicles (HFCV) Phase 2)
 - 14 (Pole Side Impact (PSI)
 - 15 (Worldwide harmonized Light vehicle Test Procedures (WLTP) – Phase 2)
 - 16 (Tyres)
 - 17 (Crankcase and evaporative emissions for two- or three-wheeled motor vehicles)
 - 18 (On-board diagnostics for two- or three-wheeled motor vehicles)
 - 19 (EVAPorative emission test procedure for the Worldwide harmonized Light vehicle Test Procedure (WLTP EVAP))
 - 20 (Electric Vehicles Safety (EVS))

Document symbol Documentation Subject ECE/TRANS/WP.29/... availability Draft UN GTR on Quiet Road Transport Vehicles (QRTV) Draft UN GTR on Global Real Driving Emissions (GRDE) Draft UN GTR on determination of electrified vehicle power (Electric vehicles and the environment) 1.2.9. Exchange of views on items for new **UN Global Technical Regulations** Harmonization of side impact Specifications for the 3-D H point machine Event Data Recorder (EDR) 1.3. 1997 Agreement (Inspections) For document symbols and its availability, please refer to the agenda (1150)1.3.1. Future development of the Agreement 1.3.2. Consideration of new UN Rules Nil 1.3.3. Update of existing UN Rules Amendment of UN Rule No. 3 Amendment of UN Rule No. 4

1.3.4. Amendments to Resolution R.E.6

ECE/TRANS/WP.29/2020/1

Table 2
Subjects under consideration by the Working Party on Noise and Tyres (GRBP)

			GRBP				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Chair/Initiator	Comments
recurrent	Maintenance of the text	Clarification/Simplification/ update of the regulations according to the feedback and the possible interpretations of the regulations		GRBP			
Priority	Real Driving Additional sound emission Provision (ASEP)	Real driving sound emissions and the extended work of IWG ASEP such as manipulation-safe active components and software, anti- tampering, ASEP NORESS	R 51, R 41	IWG ASEP	GRBP January 2020 for UN- R41.05 1 st step. GRBP January 2021 with UN- R51-04 (latest)	Chair: Germany secretariat OICA	M1, N1 L3 and their NORESS
Priority	Reverse Warning System (RWS)	Harmonisation of Reverse Warning Systems (Components and vehicles) with the aim of lower sound emissions on a high safety level. Camera Monitor systems as an alternative to RWS	New REGULATION	TF-RWS	GRBP September, 2020	Chair: Japan Secretariat OICA	[M2], N2, M3, N3
Priority	Uncertainties	Assessment of measurement uncertainties and track alignment	R51 R117 R41	TF-MU (to become an informal group)	January 2021 official document R 51 & R 117	Chair: Norway Secretariat: OICA	R 51: Noise R117: Noise Other regulations Deadline to be defined
recurrent	Selection scheme for a representative vehicle	Consideration on tolerances for type defining parameters and selection scheme for a representative vehicle for type approval test	[New] R51 R41	TF XX	Deadline to be defined	OICA	

	GRBP									
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Chair/Initiator	Comments			
Priority	Limits for R 51	Revision of limit values Phase 3 (considering new technologies and tyre noise related to UN-R51-03)	Article 11 of Regulation (EU) 540/2014, for the EC study on sound level limits, that should be published by 1/7/2021	IWG		Maybe to be created in 2020]?	M, N			
recurrent	GTR 16 phase 2	GTR 16	IWG Tyres GTR	C1, C2	Russian Federation	ETRTO	GRBP January 2020			
							(Adopted GRBP Sept 2019)			
Priority	Wet Grip on Worn Tyres (WGWT)	Additional prescriptions regarding performances on Wet Grip of Worn Tyres to be added in R 117.		IWG	C1: GRBP Jan. 2021	Co- Chairs: France & European Commission				
						Secretariat: ETRTO				
Priority	Introduction of snow tyres: 3PMSF in R 117			GOIE Snow Tyres	GRBP September 2019 for special use tyres	Chair: Germany	C1, C2, C3			
					[GRBP September 2020 full package]					
Priority	R117	Introduction of new Wet Grip test method for C1 tyres (ISO TC31 WG12)		GRBP	GRBP September 2020 (ETRTO)	ETRTO	C1			
Priority	R117	Introduction of new Traction definition for C2 and C3 tyres		GRBP	GRBP September 2020 (ETRTO)	ETRTO	C2, C3			
Priority	TPMS	Tyre Pressure Monitoring System (TPMS)		GRBP	GRBP January 2021	\	Linked to work done by EC			

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	GRBP								
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Chair/Initiator	Comments		
Priority	PTI & Roadside checks	Pass by test light for roadside- checks and PTI has to be incorporated inside R9, R41, (R63, R51) and gives guidelines and tolerances to the type approval values		[to be created after IWG ASEP]	GRBP January 2022		L3, L4, L5, M1, N1		
recurrent	New technology	Adjustment to the new technologies		GRBP					

Subjects under consideration by the Working Party on Noise and Tyres (GRBP)

Subjec	t		Document symbol Documentation ECE/TRANS/WP.29/ availability
2.1.	195	8 Agreement	For document symbols and its availability, please refer to the agenda of
2.1.1.		posal for draft amendments to existing Regulations (1958 Agreement):	the sixty-ninth session (GRBP/2020/1)
Part 1	l – No	pise:	
	41	(Noise of motorcycles);	
	51	(Noise of M and N categories of vehicles);	
	138	(Quiet road transport vehicles);	
Part 2	2 – Ty	res:	
	30	(Tyres for passenger cars and their trailers);	
	108	(Retreaded tyres for passenger cars and their trailers)	
	109	(Retreaded tyres for commercial vehicles and their trailers);	
	117	(Tyres - Rolling resistance, rolling noise and wet grip);	
2.2.	199	8 Agreement (Global)	For document symbols and its availability, please refer to the agenda of
	16	(Tyres), if needed.	the sixty-ninth session (GRBP/2020/1)

ECE/TRANS/WP.29/2020/1

Table 3
Subjects under consideration by the Working Party on Lighting and Light-Signalling (GRE)

			GRE				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
			General				
Priority	Simplification	The overarching objective is to update and harmonize technical requirements for lighting and light-signalling, suitable for global implementation under the 1958 and 1998 Agreements.	New simplified UN Regulations Nos. 148, 149 and 150 GRE reports in 2015-2019	IWG-SLR and GRE		WP.29 (EC, JPN)	The time schedule according to the T.o.R. is ambitious
			Short term	1	•	1	1
Priority	Simplification Stage 2, step 1	Revise the technical requirements of the new Regulations Nos .148, R.149, R.150, to become future proof and technology neutral, with performance-based and objective test requirements	New simplified UN Regulations Nos. 148, 149 and 150	IWG-SLR and GRE	[2020]	IWG-SLR (GRE)	Ongoing
Priority	Headlamp levelling (visibility and glare)	Taking into account glare and visibility considerations. Amend installation Regulations taking into account the work of IWG-VGL.	ECE/TRANS/WP.29/GRE/2020/8	IWG-VGL => IWG-SLR and GRE	2020	Various CP's	To be finalized
Priority	Installation New Series of Amendments for Regulation No. 48 (R.48-08)	Many proposals merged; various amendments, improvements and clarifications included (headlamps, direction indicators, daytime running lamps, rear position lamps, etc.)	UN Regulation No. 48	SIG-R.48 and GRE	2020	Various CP's	To be finalized

			GRE				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
Priority	'Unique Identifier'	Suitable application of the 'Unique Identifier' ('UI')	SLR-37-01	IWG-SLR and GRE	[2020]	IWG-SLR	Ongoing
Recurrent	Lights sources	Development of replaceable LED lights sources (incl. substitutes and replacement light sources for filament lamps)	ECE/TRANS/WP.29/2019/29, ECE/TRANS/WP.29/2019/126, ECE/TRANS/WP.29/GRE/2020/6, 	TF-S/R and GRE			Ongoing
Recurrent	Adaptation to technical progress	e.g. road light projections	ECE/TRANS/WP.29/GRE/2020/4	GRE			Continuous process
Potential	Software	Awareness of GRVA activity on software updates		GRE			t.b.c.
		-	Medium term	-	1	1	1
Priority	Simplification Stage 2, step 2	Simplify and update the technical requirements of the installation Regulations Nos. 48, 53, 74, 86, to become future proof and technology neutral, with performance-based and objective test requirements	UN Regulations Nos. 48, 53, 74, 86	IWG-SLR	[2022]	IWG-SLR (GRE)	Started
Priority	EMC issues for electrical vehicles	Further development of EMC requirements for electrical vehicles (EV's)	UN Regulation No. 10	TF-EMC			Ongoing
Recurrent	Automation	Signalling requirements for autonomous vehicles		TF-AVSR			Awaiting guidance WP.29 (WP.1?)

			GRE				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
Recurrent	Electromagnetic compatibility	Updating EMC requirements in relation to various international standards	UN Regulation No. 10	TF-EMC			Ongoing
Recurrent	Adaptation to technical progress	e.g. further development of adaptive and intelligent lighting systems		GRE			Continuous process
Potential	Sensors	New, or additional, requirements related to optical sensors (e.g. ensuring adequate illumination for – and avoid glaring of – optical sensors)		t.b.c.			t.b.c.
Potential	Reference EMC	Regulation No. 10 should become the reference for EMC requirements for all GR's	UN Regulation No. 10	TF-EMC and GRE			t.b.c.
Potential	Global harmonization	Development of globally standardized signalling for automated/ autonomous vehicles (AV's)		t.b.c.			t.b.c.
Potential	Sustainability	Attention to environmental aspects (energy efficiency, waste reduction, etc.)		GRE			t.b.c.
Potential	"Zero emission"	"Zero emission mode" light signalling (hybrid vehicles, city centers, etc.)		t.b.c.			t.b.c.
Potential	Avoid approval by- passing	Further amendments to Regulation No. 10 to avoid by-passing the approval of other regulations	UN Regulation No. 10	TF-EMC and GRE			t.b.c.

	GRE									
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments			
Potential	New systems and AV's	New, or additional, requirements for automated/autonomous vehicles (AV's) and new systems		GRE			t.b.c.			
Potential	Light source regulations	Regulatory improvement by further consolidation of the light source regulations		t.b.c.			t.b.c.			
Potential	Connected vehicles (CV's)	Connected & communicating light signalling lamps		t.b.c.			t.b.c.			

Subjects under consideration by the Working Party on Lighting and Light-Signalling (GRE)

Subject			Document symbol ECE/TRANS/WP.29/	Documentation availability		
3.1.	1958	8 Agreement	For document symb			
3.1.1.		posal for draft amendments to existing Regulations (1958 Agreement):	availability, please refer to the agenda of the eighty-third session (GRE/2020/1)			
	48	(Installation of lighting and light-signalling devices);				
	53	(Installation of lighting and light signalling devices for L_3 vehicles);				
	65	(Special warning lamps);				
	86	(Installation of lighting and light- signalling devices for agricultural tractors);				
	98	(Headlamps with gas-discharge light sources);				
	123	(Adaptive front lighting systems (AFS));				
	148	Light-Signalling Devices (LSD)				
	149	Road Illumination devices (RID)				
	150 Retro-Reflective Devices (RRD)					
3.1.2.	Prop	oosal for draft new UN Regulations:				
	Nil					
3.2.	1998	8 Agreement (Global)				
	Poss	sibility to develop further UN GTRs				
3.3.	1997	7 Agreement (Inspections)				
	Nil					
3.4.	ame	posal for draft recommendations or indments to existing immendations				
3.5.	Mis	cellaneous items	For document symb			
		endments to the Convention on Road fic (Vienna 1968)	availability, please of the eighty-first se (GRE/2020/1)			
		elopment of an international whole cle type approval (IWVTA)				
	Dec: 2020	ade of action for road safety 2011–);				
	Obse	olete transitional provisions				
	Dire	ction for future GRE work				

Table 4
Subjects under consideration by the Working Party on Pollution and Energy (GRPE)

			GRPE			
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline (WD in GRPE)	Comments
Priority	Global Real Driving Emissions (RDE) phase 1	New UN GTR and new UN Regulation	GRPE-79-20-Rev.1	IWG on GRDE	Q2 2020	
Priority	Determination of Electrified Vehicle Power (DEVP)	New UN GTR	GRPE-79-28-Rev.1	IWG on EVE	Q2 2020	New timeline announced in GRPE 79.
						IWG Mandate expiring in June 2021
Priority	In Vehicle Battery Durability	New UN GTR	GRPE-79-28-Rev.1	IWG on EVE	[Q2 2021]	IWG Mandate expiring in June 2021
Priority	Sub-23 nm exhaust particles	Amendments to UN GTR No. 15	GRPE-79-14-Rev.1	IWG on PMP	Q2 2020	IWG Mandate expiring in June 2021
Priority	Brake emissions	New UN GTR	GRPE-79-14-Rev.1	IWG on PMP	Q2 2021	About half of the work concluded. Work progress according to schedule
recurrent	Transposition to Euro VI step E	Introduction to PEMS cold start and PN-PEMS measurement to UN Regulation No. 49	ECE/TRANS/WP.29/GRPE/79, para. 26	GRPE	Q1 2021	
recurrent	New series of amendments to UN Regulation No. 83	Develop the 08 series of amendment to Un Regulation No. 83		IWG on WLTP	[Q2 2020]	
recurrent	Finalising Worldwide light duty test procedure (WLTP)	Amendments / improvements to UN GTR No. 15 and UN Regulation No. XXX on WLTP	GRPE-79-19	IWG on WLTP	Q2 2020	IWG Mandate expiring in June 2020

			GRPE			
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline (WD in GRPE)	Comments
recurrent	OBD-2 for L Category vehicles	Amendment to UN GTR No. 18	GRPE-79-24	IWG on EPPR	Q2 2020	
recurrent	Revision on M.R.3 concerning VIAQ	Amendment to Mutual Resolution No.3	GRPE-79-18	IWG on VIAQ	Q2 2020	
recurrent	Transposition of UN GTR No.2 into UN Regulation	Include latest provisions of UN GTR No. 2 into UN Regulation No.[40]	GRPE-79-24	IWG on EPPR	tbd	
potential	Lifetime compliance: In- Service Conformity, in use compliance and beyond	Ensure adequate and long-lasting environmental performance of vehicles: - In-Service Conformity (ISC) / durability provisions - On-Board Measurements and monitoring - Tampering prevention (e.g. NOx emulator, DPF removal) -Provisions for PTI		GRPE / IWG on PTI		
potential	Non-regulated Emissions	Include non-regulated pollutant into emissions regulations, if appropriate		GRPE		
potential	Tyre wear emissions	Develop methodology to characterize (PN, other?) emissions from tyre wear		IWG on PMP / GRBP ?		
potential	Heavy Duty Hybrids	Introduction of approval provisions in UNR 49 and possible Amendments to UN GTR No. 4		GRPE		
potential	Hydrogen-powered Heavy Duty	Introduction of approval provisions in UNR 49		GRPE		
potential	Powertrain definitions	Develop a more regular and systematic framework for the update of Mutual Resolution No. 2 Containing Vehicle Propulsion System Definitions		GRPE		

			GRPE			
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline (WD in GRPE)	Comments
potential	Replacement after- treatment systems	Amendments to UN Regulation No. 103		GRPE		
potential	Connected, automated and autonomous vehicles and the environment	Using vehicle connectivity, automation and self-driving capabilities to minimize environmental impact of vehicles and associated activity.		GRPE / GRVA		
potential	Method for stating energy consumption / emissions from EVs	Joint task force being set-up with the Group of experts on energy efficiency (GEEE) of the energy division of UNECE		IWG on EVE		

Subjects under consideration by the Working Party on Pollution and Energy (GRPE)

Document symbol Documentation Subject ECE/TRANS/WP.29/... availability For document symbols and its 4.1. 1958 Agreement availability, please refer to the agenda 4.1.1 Proposal for draft amendments to existing of the eighty's session (GRPE/2020/1) UN Regulations (1958 Agreement): (Visible pollutants, measurement of power of C.I. engines (Diesel smoke)); 40 (Emission of gaseous pollutants by motorcycles); 47 (Emission of gaseous pollutants of mopeds) (Emissions of compression ignition and positive ignition (LPG and CNG) engines);

- 68 (Measurement of the maximum speed, including electric vehicles);
- 83 (Emissions of M_1 and N_1 vehicles);
- 85 (Measurement of the net power);
- 96 (Diesel emission (agricultural tractors));
- 103 (Replacement pollution control devices);
- 115 (LPG and CNG retrofit systems);
- 120 (Net power of tractors and non-road mobile machinery);
- 132 (Retrofit Emissions Control devices (REC));
- 133 (Recyclability of motor vehicles);
- 143 (Heavy duty dual-fuel engine retrofit systems)
- 4.1.2. Proposal for draft new UN Regulations

Nil

4.2. 1998 Agreement (Global)

- 2 (Worldwide motorcycle emissions test cycle (WMTC));
- 4 (Worldwide harmonized Heavy-Duty Certification Procedure (WHDC));
- 5 (Worldwide harmonized Heavy duty on-board diagnostic systems (WWH-OBD));
- 10 (Off-Cycle Emissions (OCE));
- 11 (Non-road mobile machinery engines);
- 15 (Worldwide harmonized Light Vehicle Test Procedure (WLTP));
- 17 (Crankcase and evaporative emissions of L-category vehicles);
- 18 (On-Board Diagnostic (OBD) systems for L-category vehicles);

For document symbols and its availability, please refer to the agenda of the eighty's session (GRPE/2020/1)

Document symbol Documentation
Subject ECE/TRANS/WP.29/... availability

4.2.1. Proposal for developing new UN Global Technical Regulations

Vehicles Interior Air Quality (VIAQ)

4.3. 1997 Agreement (Inspections)

Ni

4.4. Proposal for draft recommendations or amendments to existing recommendations

Nil

4.5. Miscellaneous items

World-wide harmonized Light vehicles Test Procedure (WLTP)

Heavy Duty Hybrids (HDH)

Particle Measurement Programme (PMP)

Gaseous Fuelled Vehicles (GFV)

Environmental and Propulsion Performance Requirements (EPPR) for Lcategory vehicles

Electric Vehicles and the Environment (EVE)

Vehicle Propulsion System Definitions (VPSD)

Fuel Quality (FQ)

International Whole Vehicle Type Approval (IWVTA)

Exchange of information on national and international requirements on emissions

Vehicles Interior Air Quality (VIAQ)

Global Real Driving Emissions (RDE)

For document symbols and its availability, please refer to the agenda of the eighty's session (GRPE/2020/1)

 $\begin{tabular}{ll} Table 5 \\ Subjects under consideration by the Working Party on Automated / Autonomous and Connected Vehicles (GRVA) \end{tabular}$

	GRVA							
Category	Item	Activities in 2020	Top three priorities for 2021	Initiator				
ADAS	AEBS	X		EU				
	ACSF	X		OICA / AVERE				
Automated Vehicles	ALKS	X		Germany / Japan				
	FRAV	X	X	Framework doc.				
	VMAD	X	X	Framework doc.				
	DSSAD	X		Framework doc.				
Connectivity	Cyber Security	X	X	Framework doc.				
	(OTA) software updates	X		Framework doc.				
Braking	MVC	X		Sweden / OICA				
	Motocycle braking	X		Italy / IMMA				

Subjects under consideration by the Working Party on Automated / Autonomous and Connected Vehicles (GRVA)

Subject			Document symbol Documentation ECE/TRANS/WP.29/ availability
5.1.	. 1958 Agreement		For document symbols and its
5.1.1.		posal for draft amendments to existing Regulations (1958 Agreement):	availability, please refer to the agenda of the fifth session (GRVA/2020/1)
	13 a	and 13-H (Braking);	
	78	(Motorcycle braking);	
	79	(Steering equipment);	
	89	(Speed limitation devices);	
	90	(Replacement brake linings);	

5.1.2. Proposal for draft new UN Regulations:

140 (Electronic Stability Control);

139 (Brake Assist Systems);

152 AEBS for M_1 and N_1)

Nil

5.1.3. Vehicle automation

Remote Control Manoeuvring (RCM)

Automated Controlled Steering Function (ACSF)

Automated Lane Keeping Systems (ALKS)

Validation Methods for Automated Driving (VMAD)

Document symbol Documentation
Subject ECE/TRANS/WP.29/... availability

Functional Requirements for Automated and Autonomous Vehicles (FRAV)

Longitudinal control (Adaptive Cruise

Control, preventing braking);

Transition demand (Human Machine Interface (HMI));

Driver Availability Recognition;

Information to the driver (HMI);

Electronic System Compliance (Complex

Electronics Development);

Periodic Technical Inspection/

Roadworthiness Provisions;

Cyber Security;

Software (incl. Over-the-Air) updates;

Data Storage System for Automated Driving (DSSAD);

Night Vision;

Rear crossing alert;

Door-open blind spot detection;

Around view monitor

5.2. 1998 Agreement (Global)

3 (Motorcycle braking);

For document symbols and its availability, please refer to the agenda of the fifth session (GRVA/2020/1)

5.3. 1997 Agreement (Inspections)

Nil

5.4. Proposal for draft recommendations or amendments to existing recommendations:

Nil

5.5. Miscellaneous items

Intelligent Transport Systems (ITS)

Intelligent Transport Systems/Automated Driving (AD)

Connected, automated and autonomous vehicles

Functional Requirements for automated / autonomous vehicles

New assessment / Test method

Cyber security and (Over-the-Air)

Software updates

Data Storage System for Automated Driving vehicles (DSSAD)

For document symbols and its availability, please refer to the agenda of the fifth session (GRVA/2020/1)

Subject		Document symbol ECE/TRANS/WP.29/	
	Horizontal regulation on automated and autonomous vehicles and associated recommendations		
	System safety		
	Artificial Intelligence technologies for wheeled vehicles		
	Driver availability recognition		
	Vehicle cybersecurity and data protection		
	Rear crossing traffic alerting		
	Night Vision system		
	360-degree vision monitor		
	International Whole Vehicle Type Approval (IWVTA)		
	Modular Vehicle Combinations (MVC)		
	Exchange of views on innovations and relevant national activities		

Table 6 **Subjects under consideration by the Working Party on General Safety Provisions (GRSG)**

			GRSG				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
Priority	Event Data Recorder	1	ECE/TRANS/WP.29/2019/34/ Rev.	IWG on EDR/DSSAD	2020	WP.29	IWG reporting both to GRSG and GRVA
Priority	Augmented reality	Verify and address as necessary Augmented Reality related aspects in relation with existing UN Regulations / UN GTRs / UN Rules	- UN R- 125 - GRSG-117-27			OICA	
Priority	Connectivity	Virtual keys	UN R 116 GRSG-117-31			OICA	
recurrent	Consolidated Resolution on the construction of vehicles	Update to technical progress Inclusion of automated vehicles (classification)	R.E.3 GRSG-117-06			WP.29 France	
recurrent	IWVTA	Update to technical progress	UN R 0			WP.29	
recurrent	External projections of passenger cars	Update to technical progress	UN R 26			WP.29	
recurrent	Prevention of fire risks	Update to technical progress	UN R 34			WP.29	
recurrent	Foot controls	Update to technical progress	UN R 35			WP.29	
recurrent	Speedometer/odometer	Update to technical progress	UN R 39			WP.29	
recurrent	Safety glazing	Update to technical progress	UN R 43 / UNGTR 6	Panoramic Sunroof Glazing (PSG)	April 2020	Korea WP.29	
recurrent	Devices for indirect vision	Update to technical progress	UN R 46			WP.29	
recurrent	Mechanical couplings	Update to technical progress	UN R 55			WP.29	

			GRSG				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
recurrent	Rear underrun protective devices	Update to technical progress	UN R 58			WP.29	
recurrent	Driver operated controls (mopeds/motorcycles)	Update to technical progress	UN R 60			WP.29	
recurrent	Anti-theft (mopeds/motorcycles)	Update to technical progress	UN R 62			WP.29	
recurrent	Strength of superstructure (buses)	Update to technical progress	UN R 66			WP.29	
recurrent	LPG vehicles	Update to technical progress	UN R 67			WP.29	
recurrent	Lateral protection devices	Update to technical progress	UN R 73			WP.29	
recurrent	Front underrun protection	Update to technical progress	UN R 93			WP.29	
recurrent	ADR vehicles	Update to technical progress	UN R 105			WP.29	
recurrent	M2, M3 vehicles	Update to technical progress	UN R 107			WP.29	
recurrent	CNG and LNG vehicles	Update to technical progress	UN R 110			WP.29	
recurrent	Anti-theft and alarm systems	Update to technical progress	UN R 116			WP.29	Splitting into three new UN R for compatibility with IWVTA
recurrent	Burning behaviour of materials	Update to technical progress	UN R 118	Behaviour of M ₂ and M ₃ category vehicles' general construction in case of fire events (BMFE	Oct. 2020	France WP.29	
recurrent	Identification of controls, tell-tales and indicators	Update to technical progress	UN R 121			WP.29	
recurrent	Heating systems	Update to technical progress	UN R 122			WP.29	

			GRSG				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
recurrent	Accident Emergency Call Systems (AECS)	Update to technical progress	UN R 144			WP.29	
recurrent	Blind Spot Information Systems	Update to technical progress	UN R 151	Awareness of Vulnerable Road Users proximity (VRU-Proxi)	April 2021	Japan, EC WP.29	
potential	Consolidated Resolution on the construction of vehicles	catagories (a g recreational	R.E.3 GRSG-117-19			RVIA	
potential	Automated vehicles	Review/screening of existing regulations having the word "driver"	All UN Rs and UN GTRs under the purview of GRSG			GRSG (Germany)	

Subjects under consideration by the Working Party on General Safety Provisions (\mbox{GRSG})

Subject		Document symbol Documentation ECE/TRANS/WP.29/ availability
6.1.	1958 Agreement	For document symbols and its availability, please refer to the agenda for the 118th session (GRSG/2020/1)
6.1.1.	Proposal for draft amendments to existing UN Regulations (1958 Agreement):	
	43 (Safety glazing);	
	46 (Devices for indirect vision);	
	55 (Mechanical couplings);	
	58 (Rear underrun protective devices);	
	60 (Driver operated controls (mopeds/motorcycles));	
	67 (LPG vehicles);	
	93 (Front underrun protection);	
	107 (M ₂ and M ₃ vehicles);	
	110 (CNG and LNG vehicles);	
	116 (Anti-theft and alarm systems);	
	118 (Burning behaviour of materials);	
	125 (Forwardfield of Vision for Drivers);	
	144 (Accident Emergency Call Systems (AECS))	
6.1.2.	Proposal for draft new UN Regulations:	
	Advanced Driver Assistance Systems for blind spot monitoring.	
6.2.	1998 Agreement (Global)	For document symbols and its availability, please refer to the agenda for the 118th session (GRSG/2020/1
	Possibility to develop further UN GTRs	
	6 (Safety glazing)	
6.3.	1997 Agreement (Inspections)	
	Nil	
6.4.	Proposal for draft recommendations or amendments to existing recommendations:	
	Nil	
6.5.	Miscellaneous items	For document symbols and its availability, please refer to the agenda for the 118th session (GRSG/2020/1
	International Whole Vehicle Type Approval (IWVTA)	
	Consolidated Resolution on the Construction of Vehicles (R.E.3)	
	Event Data Recorder	

Table 7 **Subjects under consideration by the Working Party on Passive Safety (GRSP)**

			GRSP				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
			Short term				
Priority	Child restraint systems	Amendment of scope Harmonization and improvement of test tools	ECE/TRANS/WP.29/GRSP/2019/28	EC	Finalise in GRSP 66 th meeting, WP.29 June 2020	EC	To be finalised
Priority	Update of UN crash regulations following revised EU GSR	Depending on GRSP 66 th meeting outcome if further work is needed or is transmitted to WP.29 June 2020	ECE/TRANS/WP.29/GRSP/2019/29 ECE/TRANS/WP.29/GRSP/2019/30 ECE/TRANS/WP.29/GRSP/2019/37 ECE/TRANS/WP.29/GRSP/2019/38 GRSP-66-09	TF - EU GSR Revision	Finalise in GRSP 66 th meeting at the latest, WP.29 June 2020	EC	To be finalised
Priority	Head restraints	Transposition of GTR7 in UN R17	ECE/TRANS/WP.29/GRSP/2019/27 New consolidated working document for 67 th session of GRSP	Ad hoc group on R17	Finalise in GRSP 67 th meeting at the latest, WP.29 November 2020	EC	To be finalised
Priority	Electric vehicles safety	Transposition of GTR20 in UN R94, R95, R100, [R136] R137 [and R146], [possibly in R12 (t.b.c.)]	N/A	Ad hoc group on R100	Finalise in GRSP 67 th meeting at the latest, WP.29 November 2020	JPN, EC	Side meetings of EVS IWG Phase 2
			Medium term			l	
Priority	Deployable pedestrian protection systems	Inclusion in GTR9	ECE/TRANS/WP.29/AC.3/45 ECE/TRANS/WP.29/AC.3/45/Rev.1	IWG-DPPS	06/2020	KOR	Ongoing
Priority	Head impact zone enlargement	Inclusion in GTR9	N/A	T.b.d.	WP.29 June 2021	EC, JPN	To be started

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			GRSP				
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
Priority	Deployable pedestrian protection systems and head impact zone enlargement		N/A	N/A	WP.29 June 2021	EC, JPN	To be started
Priority	Hydrogen safety material compatibility and new tank concepts	Inclusion in GTR13 'phase 2'	ECE/TRANS/WP.29/AC.3/49	IWG-HFCV	WP.29 November 2021	JPN, KOR, EC	Ongoing
Priority	Hydrogen safety material compatibility and new tank concepts	Transposition in UN R134 [and R146]	N/A	T.b.d.		EC, JPN	To be started if agreed by GRSP
Priority	Electric vehicles safety	GTR20 Phase 2		IWG-EVS	Proposal at December 2021 GRSP	US, EC, CN, JP	Ongoing
Priority	Children in buses	New reg	2019/22 and GRSP-66-06	IWG-STCBC	WP29 March 2023	SP	Ongoing
			Long term				
Priority	Helmets	07 series of amdt Phase 2 of IWG	2019/25 and GRSP-66-22	IWG PH (mandate to be proposed)	2022 ?	FR IT	To be started if agreed by GRSP

Subjects under consideration by the Working Party on Passive Safety (GRSP)

Document symbol Documentation ECE/TRANS/WP.29/... Subject availability 7.1. 1958 Agreement For document symbols and its availability, please refer to the agenda 7.1.1. Proposal for draft amendments to existing for the sixty-seventh session UN Regulations (1958 Agreement): (GRSP/2020/1) (Safety-belts); 16 17 (Strength of seats); 21 (Interior fittings); 22 (Protective helmets); 80 (Strength of seats and their anchorages (buses)); 94 (Frontal collision); (Lateral collision) 100 (Electric power trained vehicles); 127 (Pedestrian safety); 129 (Enhanced child restraint systems) 134 (Hydrogen and fuel cell vehicles (HFCV)) 137 Frontal impact with focus on restraint systems

7.1.2. Proposal for draft new UN Regulations:

Nil

7.2. 1998 Agreement (Global)

- 9 (Pedestrian safety);
- 13 (Hydrogen and Fuel Cells Vehicles)
- 20 (Electric vehicle safety)

Side impact dummies

Electric vehicles

Vehicle Crash compatibility

7.3. 1997 Agreement (Inspections)

Nil

7.4. Proposal for draft recommendations or amendments to existing recommendations

Mutual Resolution No. 1.

For document symbols and its availability, please refer to the agenda for the sixty-seventh session (GRSP/2020/1)

Subject		Document symbol Documentation ECE/TRANS/WP.29/ availability			
7.5.	Miscellaneous items Exchange of information on national and international requirements on	For document symbols and its availability, please refer to the agenda for the sixty-seventh session (GRSP/2020/1)			
	passive safety; International Whole Vehicle Type Approval (IWVTA)				
	Securing of children in buses and coaches;				
	Exchange of views on vehicle automation;				
	Three-dimensional H-point machine;				
	Children left in cars.				