Note by the secretariat <u>Informal document</u> **WP.29-180-02**

(180th WP.29 session, 10-12 March 2020, agenda item 2.2)

Work by GRs – Priorities and recurrent items (as received from GRs)

I.) GRE

GRE				1	1		
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 lightsignalling, 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				
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	ECE/TRANS/WP.29/GRE/2020/8	IWG-VGL => IWG-SLR and GRE	2020	Various CP's	To be finalized

		taking into account the					
		work of IWG-VGL.					
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
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				
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?)
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		GRE	t.b.c.

		(energy efficiency, waste reduction, etc.)			
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.
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.

II.) 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 1st 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	

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 [GRBP September 2020 full package]	Chair: Germany	C1, C2, C3
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
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			

III.) 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
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	
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	

IV.) GRSG

GRSG				T	1		
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments
Priority	Event Data Recorder	Establish new performance requirements for EDR suitable for potential new UN R and/or UN GTR	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	
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	Oct. 2020	France WP.29	

				category vehicles' general construction in case of fire events (BMFE			
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	
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	Inclusion of other vehicle categories (e.g. recreational vehicles)	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)	

V.) GRSP

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				
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
Priority	Deployable pedestrian protection systems and head impact zone enlargement	Transposition in UN R127	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	2022 ?	FR IT	To be started if agreed by GRSP

				be proposed)			
Priority/ recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline		
Potential	Airbags jackets	New reg	(EN 1621-4)	IWG ?	2023 ?	FR ?	
	Improvement of crash safety of Motor caravans?		Crash tests on Motor caravan has been performed in Sweden revealing major shortcomings in crash safety.				Motor caravans is typical of category M1-SA with exemptions from several requirement in the EU regulations. As regulations is under update to follow GSR it is motivated to look into and question the exemption from safety requirements in Annex 11 of 2007/46/EU.
	Improve safety for wider range of population using crash test dummies and test methods more representative of the population?		Study is being finalized in Sweden on if crash test dummies today do represent population (man, women, age, length, mass) in a good way. Sweden are willing to present the result of the study in GRSP May 2020.			SE?, (EC has earlier expressed support to look at this)	In order to give better protection for the wider range of population, representation of women, elderly and other aspects of population need more attention in the design and test of safety systems.
Priority	Passive safety with regard to new seating configurations in Automated vehicles	Collect available information and data describing the expected future seating position configurations	Link to GRVA and 179 th WP29 session recommendation WP29-179-23 WP29-179-25	GRSP Taskforce to collect existing data/info	Depending from the identified "regulatory timeline"	To be defined	Automated/autonomous vehicles are seen to offer significant benefits in road safety It is expected that higher levels of

		related to highly automated and autonomous vehicles. Create a common understanding on the readiness of new systems over time and related regulatory needs and timeline		IWG to develop regulation proposals			automation will be available in the near future allowing occupants to aim for new seating configurations, e.g. improved comfort, working environment or improved communication.
		Identify a step- wise "regulatory approach" to enable the above identified solutions.					
Priority	Passive safety with regards vehicles Frontal impact, N1 and THOR (UNR No. 137)	New series of amendment to UNR No. 137	N/A	T.b.d.	WP.29	JPN, EC	To be started

Category	Item	Activities in 2020	Top three priorities for 2021	Initiator
ADAS	AEBS	X		EU
	ACSF	X		OICA / AVERE
Automated Vehicles	ALKS	X		D/J
	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
