## Subjects under consideration by the Working Party on Lighting and Light-Signalling (draft PoW of GRE => WP.29 level)

GRE										
Priority / Recurrent	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments			
Priority	Simplification Stage 2	Simplify and update the technical requirements of the new Regulations Nos. 148, 149 and 150, as well as the installation Regulations Nos. 48, 53, 74 and 86 to become future proof and technology neutral, with performance-based and objective test requirements	New simplified UN Regulations Nos. 148, 149 and 150 and amendments to UN Regulations Nos. 48, 53, 74 and 86	GRE, IWG-SLR	2022– 2024	IWG SLR (GRE)	Ongoing			
Priority	Installation New Series of Amendments for Regulation No. 48	Clarifications, particularly with regard to the inclusion of the 'park condition' and usage of certain lamps for additional signals (e.g. welcoming lights)		GRE, SIG-R.48-09	2022– 2023	Japan, supported by various CP's	Started			
Priority	EMC issues (e.g. for electrical vehicles)	Further development of EMC requirements, updating existing requirements and introduction of new provisions for adaptation to technical progress	UN Regulation No. 10	GRE, TF-EMC	2022– 2023		Ongoing			
Recurrent	Light sources	Development of replaceable LED light sources (substitutes and replacement light sources for filament lamps)	UN Regulation Nos. 37, 99 and 128 and Resolution R.E.5	GRE			Ongoing			
Recurrent	Adaptation to technical progress of lighting and light- signalling Regulations	e.g. road light projections	ECE/TRANS/WP.29/GRE/2021/18	GRE			Continuous process			
Potential priority	Global harmonization	Development of globally standardized signalling for automated/autonomous vehicles (AV's)		TF-AVSR in cooperation with GRVA (FRAV)			Start of the work needs decision of GRVA and WP.29			

## Other recurrent, potential and future items for consideration by the Working Party on Lighting and Light-Signalling (GRE level)

GRE											
Recurrent/ Potential/ Future	Title	Tasks / Deliverables	References	Allocations / IWGs	Timeline	Initiator	Comments				
Future	Sensors	New, or additional, requirements related to optical sensors (e.g. ensuring adequate illumination for – and avoid glaring of – optical sensors)	UN Regulations Nos. 48, 53, 74, 86 [UN Regulations Nos. 148, 149]	t.b.c.			t.b.c.				
Potential	Software	Awareness of GRVA activity on software updates		GRE			t.b.c.				
Potential	Reference EMC	Regulation No. 10 should become the reference for EMC requirements for all GR's. Important to try avoiding that other GR's have, or introduce, their own specific EMC requirements in(to) other Regulations	UN Regulation No.10	TF-EMC and GRE		GRE	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	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	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.				