**Work by GRs – Priorities and recurrent items**

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| **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** |
| Priority | SimplificationStage 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 andGRE | [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-SLRandGRE | 2020 | Various CP’s | To be finalized |
| Priority | InstallationNew 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.48andGRE | 2020 | Various CP’s | To be finalized |
| Priority | ‘Unique Identifier’ | Suitable application of the ‘Unique Identifier’ (‘UI’) | SLR-37-01 | IWG-SLRandGRE | [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/RandGRE |  |  | 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 | SimplificationStage 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-EMCandGRE |  |  | 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-EMCandGRE |  |  | 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. |