

**Proposal to develop a global technical regulation:  
Uniform provisions concerning vehicles with regard to the installation  
of lighting and light-signalling devices.**

**Transmitted by the representative of Canada**

**Objective of the proposal**

Each Contracting Party to the 1998 Agreement has regulations with regard to road vehicle lighting and light signalling devices. All describe photometric performance and other technical descriptions of individual lighting or light signalling devices. Photometry requirements of a specific device are often dependent on the location of this device on a vehicle. To facilitate future work on development of GTRs concerning vehicle lighting harmonization of location requirements for lighting and light signalling devices is necessary.

Harmonized regulation on installation of lighting and light-signalling devices would also allow manufacturers to reduce cost of vehicle design and production. Proposed GTR is about openings in vehicle's body and electrical harness supplying energy to lighting and light-signalling devices fitted into those openings. Unless markets would demand style differentiation between countries, it would be possible for a manufacturer to design and stamp or mould one set of body panels for a vehicle model.

More importantly, a harmonized location of light signalling marking devices would benefit the safety of the travelling public. The world-travellers are faced with diverse vehicle light signalling and marking systems, hence, different visual information from the road environment. While travelling in different countries, those drivers need time to adjust to the local conditions. During this adaptation time these vehicle operators may be confused and distracted by appearance of unknown markings and signalling and/or lack of familiar markings and signalling they are accustomed to.

To be universally meaningful the source of a visual information related to the presence, identification and/or behaviour of a vehicle on the road must be located on a vehicle in the area expected by the road users and it must convey an understandable message.

The proposed global technical regulation would apply to all on-road vehicles. It would specify requirements for the colour, location, geometric visibility and operation (electric connection) of vehicle lighting and light signalling devices. It would be designed to ensure the uniform visibility and functioning of lighting and light signalling and marking devices, in order to reduce the safety hazards caused by

confusion and diversion of the driver's attention from the driving task and by mistakes in signal comprehension.

In summary, and notwithstanding the above mentioned advantages for the manufacturers and the travelling public, it is essential that this is the first GTR developed by GRE, since, development of any other GTR related to lighting and light signalling devices would be affected by the location, geometrical visibility and operation requirements.

### **Description of the proposed regulation**

The proposed global technical regulation will be based on existing regulations of the Contracting Parties and voluntary, industry standards listed below. It will contain provisions acceptable to all concerned. Elements, which could not be agreed upon will be identified and dealt with in accordance with protocol established by AC.3 and WP.29.

The proposed GTR will be established in the format adopted by WP.29.

### **Existing regulations**

At present time there are no regulations concerning light and light-signalling devices installation in the Compendium of Candidates. The following regulations and voluntary standards would be considered during development of the global technical regulation regarding installation of lighting and light signalling devices on vehicles:

ECE Regulation No. 48 - Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signalling devices

Australian Design Rule (ADR) 13 - Installation of lighting and light-signalling devices on other than L-group vehicles.

Japan Automobile Standards Internationalization Center (JASIC)  
Automobile type approval handbook for Japanese certification -  
Technical edition II

U.S. Code of Federal Regulations (CFR) Title 49: Transportation; Part 571.108: Lamps, reflective devices and associated equipment.

Canada Motor Vehicle Safety Regulation No. 108 - Lighting system and retro-reflective devices.

### **International Voluntary Standards**

ISO 303:2001 "Road vehicles: Installation of lighting and light signalling devices for motor vehicles and their trailers"

SAE J2442:SEP2000 "Harmonized provisions for installation of lamps and retro-reflective devices on road vehicles except motorcycles"

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