New approach to lighting and light-signalling in UN Regulations

Submitted by the representative of the Working Party "Brussels 1952"*

The text reproduced below was prepared by the representative of the Working Party "Brussels 1952" (GTB) to introduce GTB's plan to help the work of the Working Party on Light and Light-Signalling (GRE) on consolidating the UN Regulations on lighting and light-signalling focused on performance requirements rather than design and technical descriptions. It is based on Informal document WP.29-157-12, distributed at the 157th session of the World Forum for Harmonization of Vehicle Regulations (WP.29) (ECE/TRANS/WP.29/1097, paragraph 23). It is submitted to WP.29 for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
A New Approach to UN Lighting and Light-Signalling Regulation

1. In response to the intervention of the representative of the European Union at the 156th session of WP.29 relating to the need to find a new approach to lighting and light-signalling regulations and following a meeting of the GTB executive with the representative of the European Union (EU) and the chair of GRE, it was suggested that GTB might develop some ideas as a basis for further discussion. GTB considered this topic during its recent meeting and would like to share its initial reaction. This will, of course, be presented in more detail to GRE during its next session.

2. The report of the 156th session states that “the representative of the EU proposed changing from the current prescriptive UN Regulations to more performance based requirements. Therefore, he invited delegates to reflect on a new approach to lighting regulations which would make them less design restrictive. In his opinion, such an approach would also reduce the number of amendments and corrigenda to lighting Regulations”.

3. In response, GTB believes that it is time to review the approach to the lighting and light signalling regulations in the context of modern requirements related to traffic safety, advanced technology and commercial pressures. There are currently 41 UN Regulations that have to be maintained and regularly amended to keep them in line with technical progress. This is creating a massive workload for all parties in terms of:

(a) Technical review and update (largely done by GTB)
(b) Drafting new proposals (by GRE experts and GTB)
(c) Consideration of the proposals at GRE (including translation) (done by GRE experts and the UN secretariat)
(d) Preparation and transmission of proposals (including translation) to WP.29 for adoption (done by the UN secretariat)
(e) Detailed analysis (including translation into all working languages) in preparation for voting at WP.29 (done by Contracting Parties to the 1958 Agreement)
(f) Submission to the UN processes for final adoption and entry into force (done by the UN secretariat)
(g) Preparation of revisions (consolidated versions of the UN Regulations) (done by the UN secretariat)
(h) Maintenance of the official and unofficial consolidations (done independently by the UN secretariat, GTB and industry to keep track of proposals for amendments passing through the system)
(i) Actions required to include the UN Regulations and their amendments into national legislation (done by Contracting Parties)
(j) Actions required by administrations not signatories to the 1958 Agreement but who are adopting the text of the UN Regulations into their national requirements.

4. Although there are numerous UN Regulations in force, each dedicated to a specific device, there is much duplication of requirements. This means that a simple change to a common test requirement, for example, results in a collective amendment that generates many individual documents for voting at WP29. Moreover, some requirements related to lighting and light-signalling devices are very technologically restrictive, forcing many
amendments with no impact on the performance of the device in question, yet necessitating prolonged discussions and creating many documents. To address these issues, with a view to the simplification of the lighting and light-signalling regulations, GTB has initiated a feasibility study based upon the following approach:

(a) The creation of three new UN Regulations (with a greater emphasis on performance requirements):

(i) Forward lighting devices
(ii) Light Signalling devices
(iii) Retro reflective and luminescent devices

The greater emphasis upon performance requirements would have the objective of producing less prescriptive regulations that could facilitate the earlier exploitation of new technologies and remove existing barriers to free competition sometimes resulting from the current "prescriptive" UN Regulations.

(b) Taking advantage of the expected introduction of the Horizontal Reference Document (HRD) under discussion in GRE and the Database for the Exchange of Type Approvals (DETA) being developed by the DETA informal working group.

(c) Certain UN Regulations would remain unchanged:

(i) Light sources according to UN Regulations Nos. 37, 99 and the new UN Regulation on standardised replaceable Light Emitting Diodes (LED).
(ii) Adaptive Front Lighting Systems (UN Regulation No. 123) – with the exception of the removal of provisions that can be transferred into the HRD.
(iii) The installation UN Regulations No. 48, 53, 74, 86. (However, GRE is already working on a rationalisation of UN Regulation No. 48)

5. However, restructuring and redrafting the UN Regulations will certainly be a major challenge that will require a high level of coordination and resources, both technical and editorial. In principle, GTB is ready to support an activity to investigate the feasibility of such an approach within the framework of GRE.