Briefing Note – Summary of Mr. P. Jean statement at the 71st GRE, April 2014

Subject: The

The European Union at WP29 in March 2012 launched an initiative to encourage a new approach to lighting and signalling regulations placing more emphasis on performance based requirements. This should have the objective of making it easier for countries who have not signed the UN "1958" agreement to adopt the UN regulations.

SUMMARY/FOLLOW-UP:

The main challenge is how to adapt the UN automotive lighting regulations to facilitate global harmonisation, ensure traffic safety and avoid being a barrier to commercial exploitation of new technologies.

The European Union and Japan launched an initiative at WP29 in March 2012 to encourage a new approach to lighting and signalling regulations placing more emphasis on performance based requirements. In the 156th session of the WP29 the EC representative proposed a change of approach from the currently "prescriptive" UN Regulations to more "performance based requirements". Delegates where invited to reflect upon a new approach to lightning regulations, which is expected to eventually make them less design restrictive. Such an approach is expected to also reduce the number of amendments and corrigenda to lighting Regulations.

At its latest 68th session, GRE resumed discussion on a possible new approach for lighting Regulations. GRE recalled the proposal from EC (GRE-67-31) on the transitional provisions of Regulation No. 48 and the proposed new approach aiming at an overall simplification process. GTB proposed in GRE-68-09 a way forward for the rationalisation of such transitional provisions. The discussion was fruitful with mixed positions. There were some opposition on the philosophy "performance based" Regulations, in particular for light sources, because these Regulations are specifically "design restrictive" (aftermarket products). This shows that the "new approach" proposed by the EC needs some common understanding on what should be achieved. EC recalled the main goals of this exercise: to have more Contracting Parties applying Regulations, to decrease the number of proposals/corrections submitted by GRE, and to clarify the administrative provisions of the Regulations. EC proposed to first establish a common understanding what was meant by "new approach" (Terms of Reference to be prepared for the next session possibly with GTB) and only subsequently find solutions to meet the goals assigned to this new approach.

It is expected that more performance-based regulations that will be less technology-specific and technology restricting will be achieved through the development of new GTRs, which are considered to be an essential means towards the overall simplification process and the attraction of more contracting parties towards the adoption of the new GTRs.

The feedback received so far designates the need 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 regulations that have to be maintained and regularly amended to keep them in line with technical progress and this is creating a massive workload for all parties. Although there are numerous regulations in force, each dedicated to a specific device, there is much duplication of requirements. For example, a simple change to a common test requirement, 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 technology 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 following the proposal of the EC has initiated a feasibility study based upon the following approach:

- 1. The creation of three new Regulations (with a greater emphasis on performance requirements): Forward lighting devices, Light Signalling devices and Retro reflective and luminescent devices.
- 2. Take advantage of the expected introduction of the Horizontal Reference Document, under discussion in GRE, and the Database for the Exchange of Type Approvals being developed by the DETA informal group.
- 3. Certain regulations would remain unchanged, i.e. light sources according to Regulations 37, 99 and the new Standardised replaceable LED's, Adaptive Front Lighting Systems (Regulation 123) and Installation regulations 48, 53, 74, 86.

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" regulations.

HARMONISATION & NON-CONTRACTING PARTIES:

- UN Regulations are applied globally and at the same time are adopted in totality by contracting parties to the 1958 agreement.
- Non-contracting parties are increasingly adopting the technical provisions of the UN regulations for incorporation into national standards and regulations, BUT are introducing their own certification systems, such as the case with China.
- There exist administrative and legislative problems of keeping the national standards and regulations in line with the UN regulations that are currently subjected to regular amendments (e.g. EU, China).
- National standards, based on UN regulations but also including additional requirements (e.g. China and India), significantly increase vehicle costs.
- ASEAN countries are considering introducing a mutual ASEAN recognition system, which under conditions may result in conflict with the principles of global harmonisation by operating in parallel with the UN system. Currently lighting innovations are originating from Europe and are being introduced into UN Regulations. Although the technical requirements of the ASEAN system may be based upon the UN regulations there is a risk that these requirements will continually be out of step with the UN regulations. This could result in a two tier approach to road safety.

JUSTIFICATION & FEASIBILITY:

• Innovative solutions sell cars and provide a competitive advantage to the investing OEM, however, innovation and the need to regulate are in conflict as a vehicle manufacturer needs to launch (a new model) as soon as possible so as to gain a competitive advantage and is generally not prepared to provide details necessary to formulate an amendment to existing regulations. In this respect, there is an increasing trend to find an interpretation of the existing text of a regulation that leads to potential conflict as administrations will

not agree on an interpretation of another administration and this results in competition distortion.

- Vehicle lighting and signalling has evolved as a complex vehicle system integrating many advanced sub-systems and technologies.
- The new "performance-based" approach is expected to facilitate the introduction of new technologies and support manufacturers to be competitive. Currently, frequent amendments are necessary to keep pace with technological development
- Other regulatory systems based on UN regulations are out of line with the latest amendments.
- The restructuring and redrafting process of the regulations will certainly be a major challenge that will require a high level of coordination and resources, both technical and editorial.
- The initiative should also have the objective of making it easier for countries who have not signed the UN "1958" agreement to adopt the technical provisions of the UN regulations. The wider adoption of the 1958 agreement is unlikely in the short / medium term however; the new approach is expected to encourage the universal adoption of simplified" UN Regulations.
- The feasibility of simplifying the current 41 UN Lighting and Light-Signalling Regulations by grouping them has to be examined in dedicated study under the GRE framework. This may potentially reduce the number of regulations from 41 to 11.
- Regulations should be simple but effective to assure minimum safety levels.
- The cost of the current system of numerous regulations and national standards is not sustainable.
- The short-term investment will be justified by the long term benefit that will result from simpler regulation for all stakeholders