# Draft report on the proposal for a gtr on motorcycle controls, tell-tales and indicators (1998 Agreement)

### I. STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION

### A. INTRODUCTION

- 1. It is important to note that many vehicle collisions result from driver distraction. One identifiable source of such distraction is diversion of the driver's attention from the driving task. This can be caused by confusing information displayed in the drivers' field of vision and unclear identification, location and, or operation of the controls necessary for vehicle operation.
- 2. The objective of the gtr is to reduce the safety hazards caused by rider distraction. Specifically, the proposal is intended to reduce distractions resulting from an error in control selection or inconsistency in graphical representations of tell-tales and indicators from one motorcycle to another.
- 3. When people purchase new vehicles in countries allowing motorcycles certified in different jurisdictions, they are faced with different tell-tales and means of identifying controls. Drivers need time to learn their dashboard messages and to identify their vehicle controls. During this time such drivers have to divide their attention between the increasingly difficult task of driving, the identification of controls and the comprehension of tell-tales provided to "ease" the driving task.
- 4. One of the main purposes of this gtr is to standardize and harmonize markings identifying controls, tell-tales and indicators. One way of doing this is through the use of symbols. A clear advantage of symbols, or pictograms, over wording is that symbols, once they have been taught to and have been recognised by the target group, overcome language barriers. Drivers shall be able to operate motorcycles safely, even if they cannot understand the language of the country they are visiting. Recognition that is independent of language is an advantage in a global motorcycle market.
- 5. Furthermore, some Contracting Parties have more than one official language and require that motorcycle safety information be presented in all official languages. This could result in a requirement to provide a language selection function to drivers or a means to display wording in all official languages, which would be difficult on space-limited dash panels.
- 6. This gtr is developed to harmonize the way in which motorcycle controls, tell-tales and indicators are installed and identified.
- 7. This gtr applies to all on-road motorcycles. It specifies requirements for the location, identification, operation, colour, and illumination of motorcycle tell-tales, indicators and controls. It also harmonizes a set of symbols for, if fitted, controls, tell-tales and indicators.
- 8. This gtr ensures the accessibility, visibility, and recognition of motorcycle controls, tell-tales, and indicators and facilitates the proper selection of controls under daylight and night-time conditions. The gtr also aims at reducing the safety hazards caused by the diversion of the rider's attention from the driving task by mistakes in selecting controls.
- 9. When implementing this gtr into national legislation, Contracting Parties may continue to offer the option to use their current required words, in addition to allowing for symbols only or symbols and supplementary words and other operational requirements than those given in this global technical regulation.
- 10. This gtr is based on existing regulations listed below. It includes the common elements from the existing regulations so as to allow the rapid acceptability of the gtr.

- 11. This gtr is currently applicable to category L 3-3, only so as to have agreement on the harmonization of symbols for controls, tell-tales and indicators. Once the GTR has been established it is the intention to study further extension to other L category vehicles.
- 12. This gtr is a first step in the harmonization process: as other controls, tell-tales and indicators get used these will be considered to be added to the current list.

### B. EXISTING REGULATIONS AND INTERNATIONAL VOLUNTARY STANDARDS

- 13. GRSG followed the recommendations of paragraph 4. of TRANS/WP29/2002/882. In the absence of a technical regulation in the compendium of candidates for gtrs, GRSG considered the documents listed below:
  - EC Directive 2009/80/EC of the European Parliament and of the Council of 13 July 2009 on the identification of controls, tell-tales and indicators for two or three-wheel motor vehicles (codified version);
  - FMVSS 123: Motorcycle controls and displays;
  - Canada Motor Vehicle Safety Regulation No. 123 Motorcycle controls and displays;
  - Japan Article 10;
  - Japan Article 46;
  - ECE Regulation 60; developed in the framework of the 1958 Agreement.
- 14. GRSG has also considered the known voluntary standards on the subject, specifically:
  - ISO 6727-1981 Road vehicles Motorcycles Symbols for controls, indicators and telltales;
  - ISO 9021-1988 Motorcycles Controls Types, positions and functions;
- 15. The above regulations and voluntary standards on the subject of the installation and identification of controls, tell-tales and indicators were used as the basis of development of the gtr.
- 16. Symbols are one of the efficient ways of communicating information to drivers. The consistent use of a selected symbol in all new motorcycles will increase its recognition. Symbols have the potential to simplify motorcycle design and, once taught and recognised, to reduce driver confusion.
- 17. This gtr attempts to reduce the variety by covering the requirements of as many controls as possible. This does not imply that all those controls and their requirements included in this gtr are mandatory. Each Contracting Party still decides the mandatory controls and the related requirements such as e.g., presence of tell-tales in their region through specific legislation.

### C. BACKGROUND TO GTR

18. The proposal to establish this gtr was adopted by the Executive Committee (AC.3) of the 1998 Global Agreement at its twenty-fifth session, in March 2009. It is described in document ECE/TRANS/WP.29/AC.3/22 (appended to this gtr in conformity with paragraph 6.2.7.

of the Agreement).

- 19. Italy agreed to sponsor the proposal for the gtr and in 2008 IMMA undertook to review the situation in relation to the similarity between the symbols used for cars and motorcycles, the recognition of symbols and market practice.
- 20. The results of the IMMA study of how the symbols were being used was presented to 95/GRSG and 139/WP29. The study stated that the symbols listed by IMMA were used worldwide. This justified them being used

in the gtr whereas those which were frequently found in some regions only could be considered for future amendments of the gtr.

- 21. The study also concluded that several Contracting Parties allowed the use of language as an alternative means of marking controls and this practice should not be affected by the adoption of the gtr by such administrations.
- 22. The first full discussion, based on the comparison document drafted by IMMA was held at 97/GRSG.
- 23. 97/GRSG proposed the formation of an Informal Group on motorcycle controls, tell-tales and indicators (MCSYM) under the chairmanship of Italy and with secretarial support from IMMA. The meetings were open to all interested parties. The participants in the informal groups included representatives of Canada, European Commission, India, Japan, Korea, USA,IMMA.

### D. PROCEDURAL BACKGROUND AND DEVELOPMENT OF THE GTR

- 24. This gtr was developed by the GRSG Informal Group on motorcycle controls, tell-tales and indicators (MCSYM).
- 25. The first Informal Group meeting was held in April 2010 and agreed the terms of reference and rules of procedure. These were then presented for agreement at 98/GRSG. Having witnessed the development of a similar gtr for cars, it was agreed that only symbols that were common and agreeable to the Contracting Parties would be included in a first phase of the gtr.
- 26. The Informal Group agreed to a time plan that would have delivered the gtr to WP29 for adoption in March 2011. The original timing has slipped as the collection and consideration of comments has taken more time than planned.
- One of the key issues for this gtr continued to be how to ensure that motorcycles with symbols only would also be allowed where the administrations had implemented language as an alternative means of marking controls. The Informal Group noted that the existence of the gtr would in no way reduce the possibilities of Contracting Parties to accept motorcycles with language instead of symbols or in addition to symbols in their territory as long as products that comply with the gtr are accepted also.
- 28. Another key issue for this gtr was the request by some administrations for the inclusion of options for the location of the controls. The Informal Group noted that the presence of options would not only push this gtr away from harmonization, it would also reduce the level of safety as riders could be faced with different locations or identifications of controls.

However, in limited cases where certain technical solutions would lead to physical difficulties to operate multiple controls at the same time, provisions for different locations are included.

29. This gtr was developed during and in between 3 Informal Group meetings and was approved by GRSG at its 100<sup>th</sup> session.

## E. REGULATORY IMPACT AND ECONOMIC EFFECTIVENESS

- 30. Although this gtr does not quantify any measurable threat to motorcycle safety, GRSG has agreed that there is a need to harmonize identification, operation and location of motorcycle controls, tell-tales and indicators.
- 31. Driver distraction is a significant contributor to incidents involving motorcycles. Standardizing controls, tell-tales and indicators could reduce driver distraction, resulting in improved safety for all road-users.
- 32. Since all the symbols prescribed in the gtr are currently accepted by most of the Contracting Parties, the cost is minimal. The gtr ensures better understanding of safety symbols by riders around the world.

33.	Defining the location, operation and identification of controls and displays is of sufficient importance to
warrant	this gtr. This gtr is a first step. As other controls, tell-tales and indicators get used and get recognition these
will be c	considered to be added to the current list through revisions and addendums to the gtr.