Consistency between the Convention on Road Traffic (1968) and Vehicle Technical Regulations

This informal document is submitted to 72/GRE for information and is planned for submission for consideration at 70/WP.1.

- 1. The text reproduced below was prepared by IMMA in order to introduce amendments to ensure consistency of Chapter II Vehicle lighting and light-signalling devices of the 1968 Convention on Road Traffic with regulations under the 1958 Agreement and regulations applicable in the European Union. The amendments refer to document TRANS/WP.1/2011/4/Rev.3. Proposals for amendments are marked in bold for new or strikethrough for deleted characters.
- 2. In the column I, reference is made to the paragraph numbers in ECE/TRANS/WP.1/2011/4/Rev.3 to which the proposed amendments apply.
- 3. In the column II, in the proposal for amendment is given in bold. Normal text is the original text in TRANS/WP.1/2011/4/Rev.2 and Rev.3.
- 4. In column III, the explanation is given with references to 1958 Agreement regulations. In italics the actual relevant paragraphs are reproduced.
- 5. This proposal supersedes working document ECE/TRANS/WP.1/2014/2 prepared for the 68th Session of WP.1 and Informal document 6 prepared for the 69th Session of WP.1. This update takes into account comments received from the experts from Germany, Laser Europe and Finland.

II III

19 to provide enhanced illumination in bends.

Bend lighting means a lighting function Bend lighting should be added. The function is specified in R53, which applies to motorcycles (L3) only.

> For motorcycles the idea is the introduction of a light on each front side of the vehicle, which comes on with the passing beam lamp, which provides light in the direction of the vehicle when the motorcycle is tilting (bending).

A bend lighting lamp need not be introduced as it may be integrated with other lamps.

Reference to ECE/324/Rev.1/Add.52/Rev.3

ECE/TRANS/505/Rev.1/Add.52/Rev.3A

2.30. "Bend lighting" means a lighting function to provide enhanced illumination in bends.

6.2.5.7. Additional light source(s) or additional lighting unit(s) may be activated only in conjunction with the principal passing-beam to produce bend lighting. The illumination provided by the bend lighting shall not extend above the horizontal plane, that is parallel with the ground and containing the reference axis of the headlamp producing the principal passing-beam for all bank angles as specified by the manufacture during type approval of the device according to Regulation No. 113.

6.2.6.1. The additional light source(s) or additional lighting unit(s) used to produce bend lighting shall be so connected that it (they) cannot be activated unless the headlamp(s) producing the principal passingbeam is (are) also activated. The additional light source(s) or additional lighting unit(s) used to produce bend lighting on each side of the vehicle may only be automatically activated when the bank angle(s) is(are) greater or equal to the minimum bank angle(s) given in the communication form for the type approval of the device according to Regulation No. 113.

The function is also specified in R48, in para 2.26. R48 applies to M/N/O category vehicles.

Reference to: E/ECE/TRANS/505/Rev.1/Add.47/Rev.9 II III

36 Subject to the possibility that exemption from all or some of these obligations may be granted in respect of mopeds by Contracting Parties which, in conformity with Article 54, paragraph 2, of the Convention, have declared that they treat mopeds as motorcycles:

- (a) Every two-wheeled motorcycle with or without side-car shall be equipped with one or two white passing beam headlamps;
- (b) Every two-wheeled motorcycle with or without side-car with a maximum design speed exceeding 40 km (25 miles) per hour shall may be equipped, in addition to the passing beam headlamps, with one or two white driving beam headlamp(s).
- (c) Every two-wheeled motorcycle with or without a side-car with a maximum design speed exceeding 50 km (31 miles) per hour shall be equipped, in addition to the passing beam headlamps, with one or two white driving-beam headlamp(s)

There is a problem with the limit 40 km/h.

- (a) ECE R 53 is applicable only for two wheeler with maximum speed exceeding 50km/h (motorcycles, L3 category)
- (b) ECE R 74, applicable to mopeds, two wheelers with Maximum design speed not exceeding 50km/h, prescribes driving beam head lamps as optional.

This would leave a mismatch between ECE Regulations and Vienna convention, for two wheelers with maximum speed between 40 and 50km/h.

As a possible solution to resolve this an additional option C is proposed:

Option in b) and mandatory in c)

New paragraph after 38 (Bis) Every motor vehicle may be equipped with the bend lighting function that can be produced in conjunction with the principal passing beam, by activating additional light source(s) or additional lighting unit(s) or through the swivelling of the main-beam headlamp on each side of the vehicle.

In the case of two-wheeled motorcycles, the additional light source(s) or additional lighting unit(s) used to produce bend lighting on each side of the vehicle may only be automatically activated and deactivated on the basis of the banking of the vehicle.

Reference to ECE/324/Rev.1/Add.52/Rev.3

ECE/TRANS/505/Rev.1/Add.52/Rev.3A

6.2.6.1. The additional light source(s) or additional lighting unit(s) used to produce bend lighting shall be so connected that it (they) cannot be activated unless the headlamp(s) producing the principal passingbeam is (are) also activated. The additional light source(s) or additional lighting unit(s) used to produce bend lighting on each side of the vehicle may only be automatically activated when the bank angle(s) is(are) greater or equal to the minimum bank angle(s) given in the communication form for the type approval of the device according to Regulation No. 113. ...

The function is also specified in R48, in para 6.16. and 6.2.7.4

Reference to: E/ECE/TRANS/505/Rev.1/Add.47/Rev.9

I	II	III
39	Every two-wheeled motorcycle with or without a side-car may be equipped with one or two white or amber daytime running lamps. If installed, the daytime running lamp shall automatically be ON when the engine is running.	Reference to E/ECE/324/Rev.1/Add.52/Rev.2/Amend.4
		E/ECE/TRANS/505/Rev.1/Add.52/Rev.2/Am end.4
	If no daytime running lamp(s) is (are) installed, the headlamp shall automatically be on when the engine is running. If the headlamp is switched on, the daytime running lamp shall not come on when the engine is running.	Paragraph 6.13.7.1., amend to read: "6.13.7.1.
		If installed, the daytime running lamp shall be switched ON automatically when the device, which starts and/or stops the engine, is in a position which makes it possible for the engine to operate.
		Furthermore, the lamps referred to in paragraph 5.10. shall not switched ON when the daytime running lamps are switched ON.
		5.11.1. The headlamp shall automatically be on when the engine is running.
40	Every two-wheeled motorcycle without side-car shall be equipped at the rear with one or two rear red position lamp(s).	The Regulation 50 specifies that we can have a pair of position lamps.
41.	Every two-wheeled motorcycle without side-car shall be equipped at the rear with one or two red non-triangular retro-reflector(s) and may be equipped at each side with one or two non-triangular retro-reflectors which are amber at the front and amber or red at the rear	ECE 53 specifies mandatory rear red retroreflector, non-triangular.
		ECE 53 specifies side retro-reflector, non-triangular: amber at the front and amber or red at the rear.
		In EU the side retro-reflectors are optional. Therefore the side reflectors should be optional in the Convention.
42.	Subject to the possibility for Contracting Parties which, in conformity with Article 54, paragraph 2, have declared that they treat mopeds as motorcycles, to exempt two-wheeled mopeds with or without side-cars from this obligation, every two-wheeled motorcycle with or without side-car shall be equipped with one or two red stop lamp(s).	Reference to ECE/324/Rev.1/Add.52/Rev.3
		ECE/TRANS/505/Rev.1/Add.52/Rev.3A
		6.4. Stop lamp
		6.4.1. Number
		One or two.