

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on Road Traffic Safety

Sixty-first session

Geneva, 21–23 March 2011

Item 5 of the provisional agenda

Proposal for amendments to the Convention on Road Traffic (Vienna 1968)

Submitted by the Working Party on Lighting and Light-Signalling (GRE)



Economic and Social Council

Distr.: General
22 December 2010

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

153rd session

Geneva, 8–11 March 2011

Item 8.5 of the provisional agenda

Other Business – Consistency between the provisions of the 1968 Vienna Convention and the provisions of the vehicle regulations adopted in the framework of the 1958 and 1998 Agreement

Proposal for amendments to the Convention on Road Traffic (Vienna 1968)

Submitted by the Working Party on Lighting and Light-Signalling (GRE)*

The text reproduced below, based on informal document No. WP.29-152-10, is submitted to the World Forum WP.29 for its consideration and possible approval in March 2011 and further submission to the Working Party on Road Safety (WP.1) (ECE/TRANS/WP.29/1087, para. 88). The task of identifying conflicting provisions between the Convention and the UNECE Regulations has been addressed by preparing a proposal for amendments to the Convention which is intended to align the technical substance of the Convention to that of the Regulations. In conformity with the mandate defined by GRE, the document, apart from a few general items, is restricted to provisions concerning the area of vehicle lighting and light-signalling, as set out in the relevant regulations to the 1958 Agreement. The amendments to the current text of the Convention are indicated by **bold** or ~~strike-through~~ characters. The explanatory note describes the background and specific issues addressed by the informal group.

* In accordance with the programme of work of the Inland Transport Committee for 2006–2010 (ECE/TRANS/166/Add.1, 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. Proposal

Article 25bis

Special regulations for tunnels indicated by special road signs

In tunnels indicated by the special road signs, the following rules shall apply:

1. All drivers are forbidden:
 - (a) to reverse;
 - (b) to make a U-turn;
 - (c) *[deleted]*
2. Even if the tunnel is lit, the **passing beam headlamps must be switched on by the driver or automatically; as an alternative, the driver may switch on the driving beam headlamps.**

Article 32

Rules of the use of lamps

1. Between nightfall and dawn and in any other circumstances when visibility is inadequate on account, for example, of fog, snowfall or heavy rain, the following lamps shall be lit on a moving vehicle:
 - (a) On power-driven vehicles and mopeds the driving **beam headlamps** or passing **beam headlamps** and the rear position lamp(s), according to the equipment prescribed by the present Convention for the vehicle of each category;
 - (b) On trailers, front position lamps, if such lamps are required according to Annex 5, paragraph **32**, of this Convention, and not less than two rear position lamps.
2. Driving **beam headlamps** shall be switched off and replaced by passing **beam headlamps**:
 - (a) In built-up areas where the road is adequately lighted and outside built-up areas where the **road** is continuously lighted and the lighting is sufficient to enable the driver to see clearly for an adequate distance and to enable other road-users to see the vehicle far enough away;
 - (b) When a driver is about to pass another vehicle, so as to prevent dazzle far enough away to enable the driver of the other vehicle to proceed easily and without danger;
 - (c) In any other circumstances in which it is necessary to avoid dazzling other road-users or the users of a waterway or railway running alongside the road.
3. When, however, a vehicle is following closely behind another vehicle, driving **beam headlamps** may be used to give a luminous warning as referred to in Article 28, paragraph 2, of the intention to overtake.
4. Fog lamps may be lit only in thick fog, falling snow, heavy rain or similar conditions and, as regards front fog **lamps**, as a substitute for passing

- beam headlamps.** Domestic legislation may authorize the simultaneous use of front fog lamps and passing **beam headlamps** and the use of front fog lamps on narrow, winding roads.
5. On vehicles equipped with front position lamps, such lamps shall be switched on together with the **driving beam headlamps**, the **passing beam headlamps** or the front fog lamps. **The function of the front position lamps may be substituted by the passing beam headlamps and/or the driving beam headlamps, provided that in case of failure of such lamps the front position lamps are automatically switched on again.**
 6. **In the absence of domestic** legislation ~~may make it compulsory for~~ drivers of motor vehicles **may** use during the day either passing **beam headlamps** or daytime running lamps. **In this case**, rear position lamps **may** be used together with the **passing beam headlamps or daytime running lamps.**
 7. During the day, a motor cycle moving on the road shall ~~display~~ **have lit** at least one passing **beam headlamp** to the front and a red lamp to the rear. Domestic legislation may permit the use of daytime running lamps instead of passing **beam headlamps.**
 8. Between nightfall and dawn and in any other circumstances when visibility is inadequate, the presence of power-driven vehicles and **of** trailers **connected to power-driven vehicles**, standing or parked on a road shall be indicated by front and rear position lamps. In thick fog, falling snow, heavy rain or similar conditions passing **beam headlamps** or front fog lamps may be used. Rear fog lamps may in these conditions be used as a supplement to the rear position lamps.
 9. Notwithstanding the provisions of paragraph 8 of this Article, within a built-up area the front and rear position lamps may be replaced by parking lamps, provided that:
 - (a) The vehicle does not exceed 6 m in length and 2 m in width;
 - (b) No trailer is coupled to the vehicle;
 - (c) The parking lamps are placed on that side of the vehicle which is furthest from the **road** edge alongside which the vehicle is standing or parked.
 10. Notwithstanding the provisions of paragraphs 8 and 9 of this Article, a vehicle may be standing or parked without any lamps lit:
 - (a) On a road lit in such a way that the vehicle is clearly visible at an adequate distance;
 - (b) Away from the **road** and hard shoulder;
 - (c) In the case of mopeds and two-wheeled motor cycles without a side-car which are not equipped with batteries, at the extreme edge of a **road** in a built-up area.
 11. Domestic legislation may grant exemptions from the provisions of paragraphs 8 and 9 of this Article for vehicles standing or parked ~~in~~ **streets** in built-up areas where there is very little traffic.

12. Reversing lamps may be used only when the vehicle is reversing or about to reverse; **optional additional reversing lamps may remain illuminated during slow forward manoeuvres.**
13. Hazard warning signal may be used only to warn other road-users of a particular danger:
 - (a) When a vehicle which has broken down or has been involved in an accident cannot be moved immediately, so that it constitutes an obstacle to other road-users;
 - (b) When indicating to other road-users the risk of an imminent danger.
14. Special warning lamps:
 - (a) Displaying a blue light may be used only on priority vehicles when carrying out an urgent mission or when in other cases it is necessary to give warning to other road-users of the presence of the vehicle;
 - (b) Displaying an amber light may be used only when the vehicles genuinely assigned to the specific tasks for which they were equipped with the special warning lamp or when the presence of such vehicles on the road constitutes a danger or inconvenience to other road-users.

The use of warning lamps displaying other colours may be authorized by domestic legislation.
15. In no circumstances shall a vehicle display a red light to the front or white light to the rear, subject to the exemptions mentioned in Annex 5, paragraph 61. A vehicle shall not be modified or lamps added to it in a way which could conflict with this requirement.

Annex 1

Exceptions to the Obligation to Admit Motor Vehicles and Trailers in International Traffic

8. Contracting Parties may refuse to admit to their territories in international traffic any motor vehicle equipped with **passing beam** headlamps with asymmetric beams if such beams have not been adapted to suit the direction of traffic in their territories.

Annex 5

Technical Conditions Concerning Motor Vehicles and Trailers

1. Without prejudice to the provisions of Article 3, paragraph 2 (a) and Article 39, paragraph 1 of this Convention any Contracting Party may, with respect to motor vehicles which it registers and to trailers which it allows on the road under its domestic legislation, lay down rules which supplement, or are stricter than, the provisions of this Annex. All vehicles in international traffic must meet the technical requirements in force in their country of registration when they first entered into service.
- 1bis. Vehicles, their systems, parts and equipment that have been approved in conformity with the Regulations annexed to the "Agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions" done at Geneva on 20 March 1958, including the Amendments, are deemed to be in conformity with this Annex, provided that the above-mentioned Regulations are not contrary to the principles defined in letter V of Article 1, paragraphs 1 and 5 of Article 8 and paragraph 1 of Article 13 of the Convention.**
2. For the purposes of this Annex, the term "trailer" applies only to a trailer designed to be coupled to a motor vehicle.
3. Contracting Parties which, in conformity with Article 1, subparagraph (n), of this Convention, have declared that they wish to treat as motor cycles three-wheeled vehicles the unladen mass of which does not exceed 400 kg, shall make such vehicles subject to the rules laid down in this Annex either for motorcycles or for other motor vehicles.

Chapter II

Vehicle lighting and light-signalling devices

19. For the purposes of this chapter, the term:

"Driving beam headlamp" means the lamp used to illuminate the road over a long distance ahead of the vehicle;

"Passing beam headlamp" means the lamp used to illuminate the road ahead of the vehicle without causing undue dazzle or **discomfort** to oncoming drivers and other road-users;

"Adaptive front lighting system" means a lighting device providing beams with differing characteristics for automatic adaptation to varying conditions of use of the passing beam and/or the driving beam,

"Cornering lamp" means a lamp [activated automatically and] used to provide supplementary illumination of that part of the road which is located near the forward corner of the vehicle at the side towards which the vehicle is going to turn,

"Front position lamp" means the lamp used to indicate the presence and the width of the vehicle when viewed from the front;

"Rear position lamp" means the lamp used to indicate the presence and the width of the vehicle when viewed from the rear;

"Stop lamp" means the lamp used to indicate to other road-users to the rear of the vehicle that the **longitudinal movement of the vehicle is intentionally retarded;**

"Emergency stop signal" means an automatically generated signal to indicate to other road users to the rear of the vehicle that a high retardation force has been applied to the vehicle relative to the prevailing road conditions; it is provided by the simultaneous operation of all the stop or direction indicator lamps of the vehicle;

"Rear-end collision alert signal" means an automatic [ally generated] signal given by the leading vehicle to the following vehicle. It warns that the following vehicle needs to take emergency action to avoid a collision;

"Front fog lamp" means the lamp used to improve the illumination of the road ahead of the vehicle in case of **fog or any similar condition of reduced visibility;**

"Rear fog lamp" means the lamp used to make the vehicle more easily visible from the rear in **dense fog or any similar condition of reduced visibility;**

"Reversing lamp" means the lamp used to illuminate the road to the rear of the vehicle and provide a warning signal to other road-users that the vehicle is reversing or about to reverse, **or, in the case of optional additional reversing lamps, to provide illumination to the side for slow manoeuvres;**

"Direction-indicator lamp" means the lamp used to indicate to other road-users that the driver intends to change direction to the right or to the left; **a direction indicator lamp or lamps may also be used to indicate the function of a vehicle alarm system;**

"Parking lamp" means **a lamp which is used to draw attention to the presence of a stationary vehicle in a built-up area. In such circumstances it replaces the front and rear position lamps;**

"End-outline marker lamp" means the lamp **fitted near to the extreme outer edge and as close as possible to the top of the vehicle and intended to indicate clearly the vehicle's overall width. This lamp is intended, for certain vehicles and trailers, to complement the vehicle's front and rear position lamps by drawing particular attention to its bulk;**

"Hazard warning signal" means the signal given by the simultaneous functioning of all **a vehicle's direction-indicator lamps to show that the vehicle temporarily constitutes a special danger to other road users;**

"Side marker lamp" means **a lamp used to indicate the presence of the vehicle when viewed from the side;**

"Special warning lamp" means **a lamp emitting blue, red or amber light intermittently for use on vehicles and intended** to indicate either priority vehicles or a vehicle or a group of vehicles whose presence on the road requires other road-users to take special precautions, in particular, convoys of vehicles, vehicles of exceptional size and road construction or maintenance vehicles or equipment;

"Rear registration plate lamp" means the device **used to illuminate the space reserved for the rear registration plate; such a device may consist of several optical components;**

"Daytime running lamp" means a lamp **facing in a forward direction used to make the vehicle more easily visible when driving during daytime;**

"Exterior courtesy lamp" means **a lamp used to provide supplementary illumination to assist the entry and exit of the vehicle driver and passenger or in loading operations;**

"Retro-reflector" means a device used to indicate the presence of a vehicle by **the reflection of light emanating from a light source not connected to the vehicle, the observer being situated near the source;**

"Conspicuity marking" means **a device intended to increase the conspicuity of a vehicle, when viewed from the side or rear, (or, in the case of trailers, additionally from the front) by the reflection of light emanating from a light source not connected to the vehicle, the observer being situated near the source;**

"Illuminating surface" means the orthogonal projection **of the lamp in a plane perpendicular to its axis of reference and in contact with the exterior light-emitting surface of the lamp. For a retro-reflector, the light-emitting surface is considered to be delimited by planes contiguous to the outermost parts of the retro-reflector's optical system;**

["Single lamp" means a lamp with one lighting or light signalling function, one or more light sources and one illuminating surface which may be continuous or composed of two or more distinct parts or an assembly of two independent lamps having the same function, or two independent retro-reflectors, installed so that the projection of their illuminating surfaces in the direction of the reference axis occupies not less than 60 per cent of the smallest quadrilateral circumscribing these projections. If the surface is composed of more than two distinct parts either the total area of the projections shall occupy not less than 60 per cent of the smallest quadrilateral circumscribing these projections or the distance between two adjacent distinct parts shall not exceed 15 mm.]

["Two lamps" or "an even number of lamps" means a single light-emitting surface in the shape of a band or strip if this is placed symmetrically in relation to the median longitudinal plane of the vehicle, extends on both sides to within at least 0.4 m of the extreme outer edge of the vehicle and is not less than 0.8 m long. The illumination shall be provided by not less than two light sources placed as close as possible to its ends. The light-emitting surface may be constituted by a number of juxtaposed elements, the projections of the several light-emitting surfaces shall occupy not less than of the 60 per cent of the smallest rectangle circumscribing these surfaces.]

["Interdependent lamp system" means an assembly of two or three interdependent lamps providing the same function. They operate together when activated, have separate illuminating surfaces in the direction of the reference axis and separate lamp bodies, and may have separate light sources which are switched on and off simultaneously. The distance between two adjacent illuminating surfaces does not exceed 75 mm when measured in the direction of the reference axis.]

- [19.bis A function can be performed by more than one lamp]
20. The colours of lights mentioned in this chapter should, as far as possible, [shall] be in accordance with the **definitions** given in **UNECE Regulation No. 48 under the "Agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions"**.
21. With the **exception** of motorcycles, every motor vehicle **with a maximum speed exceeding 40 km (25 miles) per hour shall be equipped in front with an even number of white or selective–yellow driving beam headlamps or the relevant parts of an adaptive front lighting system.** ~~The outer edges of the illuminating surfaces of the driving lamps shall in no case be closer to the extreme outer edge of the vehicle than the outer edges of the illuminating surfaces of the passing lamps.~~
22. With the exception of motor cycles, every motor vehicle **with a maximum speed exceeding 10 km (6 miles) per hour shall be equipped in front with two white or selective–yellow passing beam headlamps or the relevant parts of an adaptive front lighting system.** ~~A motor vehicle shall be equipped with a device such that no more than two~~

~~passing lamps may be lit simultaneously. Passing lamps shall be so adjusted as to comply with the definition in paragraph 19 of this Annex.~~
The activation of passing beam headlamps and/or the change from driving to passing beam may be automatic as a function of ambient or traffic conditions.

23. ~~Every motor vehicle other than a two-wheeled motor cycle without side-car shall be equipped in front with two white front position lamps. however, selective yellow shall be permitted for front position lamps incorporated in driving lamps or passing lamps which emit a selective yellow beam. These front position lamps, when they are the only lamps switched on at the front of the vehicle, shall be visible at night in clear weather without causing undue dazzle or inconvenience to other road users.~~
24. (a) Every motor vehicle other than a two-wheeled motor cycle without side-car shall be equipped at the rear with an even number of red rear position lamps; ~~visible at night in clear weather without causing undue dazzle or inconvenience to other road users;~~
- (b) Every trailer shall be equipped at the rear with an even number of red rear position lamps. ~~visible at night in clear weather without causing undue dazzle or inconvenience to other road users. It shall, however, be permissible for a trailer whose overall width does not exceed 0.80 m to be equipped with only one such lamp if the trailer is coupled to a two-wheeled motorcycle without side-car.~~
25. Every motor vehicle or trailer displaying a registration number at the rear shall be equipped with a rear registration plate **lamp**.
26. The electrical connections **on all motor vehicles (including motor cycles) and on all combinations consisting of a motor vehicle and one or more trailers** shall be such that the driving **beam headlamps**, the passing **beam headlamps** and the front fog lamps can only be switched on together with the rear and front position lamps, the end-outline marker lamps, if they exist, the side marker lamps, if they exist, and the rear **registration plate lamp**. However, this provision shall not apply to driving **beam headlamps** or passing **beam headlamps** when they are used to give the luminous warning referred to in Article 32, paragraph 3, of this Convention.
27. **Every motor vehicle except motor cycles and every trailer may [shall] be fitted at the rear with one or two red rear fog lamps; they** shall be able to be switched on only if the driving **beam headlamps**, the passing **beam headlamps** or the front fog lamps are switched on.
28. Every motor vehicle other than two-wheeled motor cycles without side-car shall be equipped at the rear with at least two red **retro**-reflectors of other than triangular form. ~~When illuminated by the driving, passing or fog lamps of another vehicle, the reflex reflectors shall be visible to the driver of that vehicle at night in clear weather.~~ **The illuminating surface of a retro-reflector may have parts in common with that of any other lamp mounted at the rear.**
29. Every trailer shall be equipped at the rear with at least two red **retro**-reflectors. These **retro**-reflectors shall have the shape of an equilateral triangle with one vertex uppermost and one side horizontal. ~~No signal~~

~~lamp shall be placed inside the triangle. These reflex reflectors shall meet the requirements for visibility laid down in paragraph 27 above. However, trailers with an overall width not exceeding 0.80 m may be equipped with only one reflex reflector if they are coupled to a two-wheeled motorcycle without side-car. The illuminating surface of a retro-reflector may have parts in common with that of any other lamp mounted at the rear.~~

30. Every motor vehicle except a motor cycle with a length exceeding 6 m and every trailer may [shall] be fitted with (an) amber side retro-reflector(s). The rearmost side retro reflector may be red if it is combined with a red rear lamp.
31. Every motor vehicle except a motor cycle and every trailer with a length exceeding 6 m (for trailers including the drawbar) may [shall] be fitted with amber side marker lamps. The rearmost side marker lamp may be red if it is combined with a red rear lamp.
32. Every trailer shall be equipped at the front with two white **retro**-reflectors of other than triangular form. ~~These reflex reflectors shall meet the *words deleted* visibility requirements laid down in paragraph 27 above.~~
33. Every motor vehicle for the transport of goods with a maximum mass exceeding 7500 kg and every trailer with a maximum mass exceeding 3500 kg may be fitted, to the extent permitted by the design and operation of the vehicle, with white or yellow conspicuity markings on the side and with red or yellow conspicuity markings on the rear. Such markings may also be fitted totally or partly to other vehicles. Trailers may be fitted with white conspicuity markings on the front.
34. A trailer shall be equipped at the front with two white front position lamps if its width exceeds 1.60 m. ~~The front position lamps thus prescribed shall be fitted as near as possible to the extreme outer edge of the trailer.~~
35. With the exception of two-wheeled motor cycles with or without side-car, every motor vehicle and **with a maximum speed** exceeding 25 km (15 miles) per hour and every trailer shall be equipped at the rear with at least two red stop lamps. **An additional center high-mounted stop lamp may be fitted on passenger cars; it may also be fitted on trucks with open cargo space and with a maximum mass not exceeding 3,500 kg. It is optional on all other motor vehicles.** ~~the luminous intensity of which is markedly higher than that of the rear position lamps. The same provision shall apply to every trailer which is the last vehicle in a combination of vehicles.~~
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 motor cycle with or without side-car shall be equipped with one or two **white [or selective yellow] passing beam headlamps** satisfying the conditions regarding colour and visibility laid down in paragraph 22 above;
 - (b) Every two-wheeled motor cycle with or without side-car **with a maximum speed of 40 km (25 miles) per hour** shall be equipped,

- in addition to the passing **beam headlamps**, with at least one **white [or selective yellow]driving-beam headlamp** satisfying the conditions regarding colour and visibility laid down in paragraph 21 above. ~~If such a motorcycle has more than one driving lamp, these lamps shall be situated as close together as possible.~~
37. Every two-wheeled motor cycle without side-car may be equipped at the front with one or two **white[or selective yellow]or amber** front position lamps satisfying the conditions regarding colour and visibility laid down in paragraph 23 above. ~~If such a motorcycle has two front position (side) lamps, these lamps shall be situated as close together as possible.~~
38. **Every motor vehicle may be equipped with two white or amber daytime running lamps.**
39. **Every two-wheeled motor cycle may be equipped with one or two white or amber daytime running lamps;**
40. Every two-wheeled motor cycle without side-car shall be equipped at the rear with one rear **red** position lamp. ~~satisfying the conditions regarding colour and visibility laid down in paragraph 24 (a) above.~~
41. Every two-wheeled motor cycle without side-car shall be equipped at the rear with a **red** non-triangular reflex-reflector. ~~satisfying the conditions regarding colour and visibility laid down in paragraph 27 above.~~
42. Subject to the possibility for Contracting Parties which, in conformity with Article 54, paragraph 2, have declared that they treat mopeds as motor cycles, 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 a **red** stop lamp. ~~conforming to the provisions of paragraph 31 above.~~
43. Without prejudice to the provisions concerning lamps and devices prescribed for two-wheeled motor cycles without side-car, any side-car attached to a two-wheeled motor cycle shall be equipped at the front with a **white [or selective yellow]or amber** front position lamp ~~satisfying the conditions regarding colour and visibility laid down in paragraph 23 above~~, and at the rear with a **red** rear position lamp ~~satisfying the conditions regarding colour and visibility laid down in paragraph 24 (a) above~~ and with a **red retro**-reflector ~~satisfying the conditions regarding colour and visibility laid down in paragraph 27 above~~. The electrical connections shall be such that the front position lamp and rear position lamp of the side-car are switched on at the same time as the rear position lamp of the motorcycle.
44. Motor vehicles with three **wheels** placed symmetrically in relation to the vehicle's median longitudinal plane, which are treated as motor cycles pursuant to Article 1, subparagraph (n), of the Convention, shall be equipped with the devices prescribed in paragraphs 21, 22, 23, 24 (a), **28** and **35** above. However, on an electric vehicle the width of which does not exceed 1.30 m and the **maximum** speed of which does not exceed 40 km (25 miles) per hour a single driving **beam headlamp** and a single passing **beam headlamp** are sufficient.
45. Every motor vehicle [**and every motor cycle with a maximum speed exceeding 50 km/h**] except a moped, and every trailer shall be equipped

- with **amber** direction-indicator **lamps**, fitted on the vehicle in even numbers.
46. **Every motor vehicle may be fitted with one or two white or selective-yellow front fog lamps; they shall be placed in such a way that no point on their illuminating surface is above the highest point on the illuminating surface of the passing-beam headlamps.**
47. ~~No reversing lamp shall cause undue dazzle or inconvenience to other road users. Motor vehicles with a length not exceeding 6 m may [shall] be fitted with one or two white reversing lamps at the rear. Two additional white reversing lamps may be fitted on the side of motor vehicles with a length exceeding 6 m. Reversing lamps shall be lit only when the reverse gear is engaged. However, the two additional side reversing lamps may be switched on at forward speeds of the vehicle not exceeding 10 km/h; they shall be automatically switched off if the speed is higher.~~
48. No lamps, other than direction-indicator lamps, the hazard warning signal, **stop lamps when operated as emergency stop signal** and special warning lamps, shall emit a winking or flashing light. Side **marker** lamps may **flash** at the same time as direction-indicator lamps.
49. Special warning lamps shall emit a winking or flashing light. Colours of these lights should conform to the provisions of Article 32, paragraph 14.
50. Every motor vehicle except motor cycles and every trailer shall be so equipped that they can emit a hazard warning signal.
51. **Every motor vehicle except motor cycles may be so equipped that it can emit a rear-end collision alert signal, which is given by the simultaneous operation of all direction indicator lamps.**
- ~~52. Every motor vehicle except motor cycles may be equipped with one or two red rear fog lamps.~~
52. **Rear direction indicators lamps, rear position lamps, stop lamps and rear fog lamps on motor vehicles may have variable luminous intensity.**
53. Every motor vehicle and trailer more than 1.80 m wide may be fitted with **end-outline** marker lamps. Such lamps shall be mandatory if the width of a motor vehicle or trailer exceeds 2.10 m. If these lamps are **fitted**, there shall be at least two of them and they shall emit white or amber light towards the front and red light towards the rear.
54. **Every motor vehicle except a motor cycle may be fitted with white cornering lamps.**
55. **Every motor vehicle except a motor cycle may be fitted with white exterior courtesy lamps**
- ~~43. For the purposes of the provisions of this Annex:~~
- ~~Any combination of two or more lamps, whether identical or not, but having the same function and the same colour of light, shall be deemed to be a single lamp;~~
- ~~A single illuminating surface in the shape of a band shall be deemed to be two or an even number of lamps if it is placed symmetrically to the~~

~~median longitudinal plane of the vehicle. The illumination of such a surface shall be provided by at least two light sources placed as close as possible to its ends.~~

56. Lamps on a given vehicle having the same function and facing in the same direction, shall be of the same colour.
57. Lamps and **retro**-reflectors which are of even number shall be placed symmetrically in relation to the vehicle's median longitudinal plane, except on vehicles with an asymmetrical external shape. The intensity of the lamps in each pair shall be substantially the same. **These provisions do not apply to an adaptive front lighting system.**
58. Lamps of different kinds, and, subject to the provisions of other paragraphs of this Chapter, lamps and **retro**-reflectors, may be grouped or incorporated in the same device, provided that each of these lamps and reflectors complies with the applicable provisions of this Annex.

Chapter III

Other requirements

Paragraphs 46 to 59, renumber as paragraphs 59 to 72.

Chapter IV

Exemptions

73. For domestic purposes, Contracting Parties may grant exemptions from the provisions of this Annex in respect of:
- (a) Motor vehicles and trailers which, by virtue of their design, **have a maximum speed not exceeding** 30 km (19 miles) per hour or whose speed is limited by domestic legislation to 30 km per hour;
 - (b) Invalid carriages, i.e. small motor vehicles specially designed and constructed – and not merely adapted – for use by a person suffering from some physical defect or disability and normally used by that person only;
 - (c) Vehicles used for experiments whose purpose is to keep up with technical progress and improve road safety;
 - (d) Vehicles of a special form or type, or which are used for particular purposes under special conditions;
 - (e) Vehicles adapted for use by handicapped persons.
74. Contracting Parties may also grant exemptions from the provisions of this Annex in respect of vehicles which they register and which may enter international traffic:
- ~~(a) By authorizing the use of the colour amber for the front position lamps of motor vehicles and trailers;~~
 - (b) As regards the position of lamps on special-purpose vehicles whose external shape is such that the said provisions could not be

observed without the use of mounting devices which could easily be damaged or torn off;

- (c) As regards trailers, carrying long loads (tree trunks, pipes, etc.), which are not coupled to the drawing vehicle when in movement, but merely attached to it by the load;
- (d) By authorizing the emission towards the rear of white light and towards the front **or** red light for the following equipment:
 - Revolving **or** flashing lamps of priority vehicles;
 - Fixed lamps for exceptional loads;
 - Side lamps and reflex-reflectors;
 - Professional lighted signs on the roof;
- (e) By authorizing the emission of blue light towards the front and towards the rear for revolving or flashing lamps;
- (f) By authorizing on any side of a vehicle of a special shape or kind or used for special purposes and in special conditions, alternating red retro-reflective or fluorescent and white retroreflective strips;
- (g) By authorizing the emission towards the rear of white or coloured light reflected by figures or letters or by the background of rear registration plates, by distinctive signs or by other distinctive marks required by domestic legislation;
- ~~(h) By authorizing the use of the colour red for rearmost lateral reflex-reflectors and side lamps.~~

Appendix, to be deleted

B. Explanatory Note

1. Background

1. The Vienna Convention (and in particular its Annex 5) at its origin, although intended to facilitate international traffic of vehicles in service, was considered also as a reference for a minimum set of safety standards for road vehicles which would be applicable on a worldwide basis. When it was done in Vienna on 8 November 1968 harmonization of type approval provisions on lighting and light-signalling of road vehicles was in its first stage; eight Regulations had entered into force. At present, there are 40 Regulations in this area. The key Regulations are applied by most or all of the Contracting Parties to the 1958 Agreement.

2. A number of countries are Contracting Parties of both the Convention (at present 69 Contracting Parties) and the 1958 Agreement (at present 48 Contracting Parties). Although the legal objectives of the two instruments are different and notwithstanding the provisions in Annex 5 para. 1 of the Convention, it was considered desirable, from a practical point of view, to work towards an alignment of the technical substance.

3. In view of this situation The Working Party on Road Traffic Safety (WP.1) had initiated work to eliminate possible inconsistencies between the Regulations and the Convention, in order to avoid a situation where a vehicle with systems or devices approved to the actual state of Regulations could have difficulties in international traffic. At a certain stage this work involved also WP.29 and GRE as its competent Working Party, considering that a large part of the technical provisions in Annex 5 of the Convention addresses lighting and light-signalling of road vehicles.

4. At its sixty-third session GRE noted the status of considerations in WP.1 and WP.29 concerning the technical inconsistencies between the 1968 Vienna Convention and the UNECE Regulations under the 1958 Agreement, and agreed to set up an informal group to identify such conflicting provisions in the area of lighting and light-signalling. It was also agreed that Germany should assume the pilotship of this informal group. At its 151st session, WP.29 endorsed the setting up of the informal group.

5. The approach chosen to comply with this mandate is to develop a proposal for amendments to the Convention which would ensure that a vehicle with lighting and light-signalling devices designed and installed in conformity with the UNECE Regulations can circulate without problems in the territories of the Contracting Parties to the Convention.

6. A first version of such a proposal was circulated to all GRE experts on 13 July 2010. Experts were invited to inform the pilot not later than 27 August 2010

- About their intention to participate in the informal group;
- About their comments, if any, to the proposal.

7. As required by the mandate for the informal group, the comparison between the Convention and the Regulations on lighting and light-signalling was based on

- The consolidated version of the Convention including the amendments which entered into force on 28 March 2006;
- The current status of the Regulations under the 1958 Agreement including amendments which were approved in 2010 by WP.29 and GRE.

8. Comments received have been processed and reviewed by the pilot and those GRE experts who had indicated their participation in the informal group. The present version of

the proposal has been drafted in a meeting of the informal group which took place during the sixty-fourth session of GRE in October 2010. It takes into account the subsequent comments received from GRE experts and also the oral remarks noted during the 152nd WP.29 session.

2. Specific Issues

1. Paragraph 1.bis in Annex 5 has been drafted to take into account the proposals developed by a small group in WP.1 and also the concerns raised by governments with regard to driver assistance systems, i.e. that the driver should remain in permanent control of the vehicle (ECE/TRANS/WP.29/1085, paras. 66 and 67).

2. As a rule, definitions have been aligned to Regulation No. 48; if considered appropriate, simplified wording has been used in some cases, in order to remain in the context of the Convention, e.g. use "illuminating surface" throughout, instead of "apparent surface". Terminology has been updated to reflect current practice, e.g. for headlamps and maximum speed. Headlamps are designated always by "driving beam" or "passing beam"

3. The definitions of

- single lamp
- two lamps, and
- interdependent lamp system,

which were taken from Regulation No. 48 and (for the first two) are referenced in Annex 5, para. 43, have been put in square brackets, as the informal group was not convinced that they would be useful in practical application of the Convention. A new para. 19.bis is proposed as an alternative.

4. Efforts were made to keep the provisions in the Convention straightforward and to restrict them, if possible to presence, number, colour and use of devices. It was also considered advisable to mention features which can easily be verified by drivers and other road users, such as adaptive or variable intensity lighting and collision or emergency stop signals. Requirements which would refer to subjective evaluation or verification of characteristics, such as "visible at night in clear weather" or "without causing undue dazzle to other road users" have not been included.

5. For certain devices which are mandatory under Regulation No. 48, it was discussed whether this should be required under the Convention. For conspicuity markings (para. 33) and daytime running lamps (para.38) optional presence is recommended. For reversing lamps (para. 47) the decision was left open, as this is considered to be a safety issue.

6. For certain front lighting devices both colours white and selective yellow have been inserted in order to cover actual practice in the Contracting Parties, see paras. 21, 36, 37 and 43 of Annex 5.

7. Amber has been inserted as an option to white for the colour of motor cycle front position lamps, as GRE considered this as an improvement of the "signature" of motor cycles.

8. At the request of several governments Regulation No. 65 has been amended recently to permit red as a third colour besides blue and amber for special warning lamps. As a consequence, Article 32 paragraph 14. (a) has been amended to include red for the purposes set out in this paragraph.

9. The sequence of paras. 6 and 7 in Article 32 was reversed for more clarity.

10. Exemptions in Annex 5 Chapter IV concerning amber front position lamps and red rearmost lateral retro reflectors/side lamps have been deleted as such devices are now covered by the provisions in Annex 5.
 11. The appendix to Annex 5 was deleted, as colours of active and passive lighting and light signalling devices are specified in Regulation No. 48.
 12. The terms "carriageway" and "road" are both used in the Convention. In line with Regulations the term "road" has been inserted where appropriate.
 13. A number of editorial errors have been corrected.
-