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INLAND TRANSPORT COMMITTEE

World Forum for Harmonisation of Vehicle Regulations (WP.29)

Working Party on General Safety Provisions (GRSG)
(Eightieth session, 2-6 April 2001,
agenda item 11.2.)

PROPOSAL FOR A NEW DRAFT REGULATION:
UNIFORM PROVISIONS CONCERNING THE APPROVAL OF VEHICLES WITH REGARD TO THE
SPECIFICATIONS FOR CONTROLS, TELL-TALES AND INDICATORS

Revision 3

Transmitted by the Experts from Canada

Note: The text reproduced below was prepared by the experts from Canada, the United Kingdom, the United States of America and OICA in order to update the text of the proposed new draft Regulation to be annexed to the 1958 Agreement. This text is based on document TRANS/WP.29/GRSG/1999/19/Rev.3 and includes suggestions prepared by OICA (informal document No. 16) for the eightieth session of GRSG.

Note: This document is distributed to the Experts on General Safety Provisions only.

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Regulation No. XXX

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF VEHICLES WITH REGARD TO THE
IDENTIFICATION OF CONTROLS, TELL-TALES AND INDICATORS

1. SCOPE

This Regulation applies to **identification of hand controls, tell-tales and indicators** in vehicles of categories M and N. 1/ It specifies requirements for the location, identification, colour, and illumination of motor vehicle controls, tell-tales and indicators. It is designed to ensure the accessibility and visibility of vehicle controls, tell-tales, and indicators and to facilitate their selection under daylight and night-time conditions, in order to reduce the safety hazards caused by the diversion of the driver's attention from the driving task and by mistakes in selecting controls.

2. DEFINITIONS

For the purpose of this Regulation

2.1. "Control" means that **hand-operated** part of a device that enables the driver to bring about a change in the state or functioning of a vehicle or vehicle's subsystem.

2.2. "Device" means an element or an assembly of elements used to perform one or more functions.

2.3. "Indicator" means the part of a device that shows the quantity of the physical characteristics that the instrument is designed to sense.

~~2.4.~~

2.5. "Tell-tale" means an optical signal that, when alight, indicates the actuation of a device, a correct or defective functioning or condition, or a failure to function.

2.6. "Manufacturer" means the person or body who is responsible to the approval authority for all aspects of the type approval process and for ensuring conformity of production. It is not essential that the person or body is directly involved in all stages of the construction of the vehicle, system, component or separate technical unit which is the subject of the approval process.

1/ Categories M and N as defined in annex 7 to the Consolidated Resolution of the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.1/Amend.2).

- 2.7. "Vehicle type" means motor vehicles which do not differ in respect of the internal arrangements which may affect the identification of symbols for controls, tell-tales, and indicators and operation of controls.
- 2.8. "Approval of a vehicle" means the approval of a vehicle type with regard to the mode of installation, graphical design, legibility, colour, and brightness of controls, tell-tales, and indicators.
- 2.9. "Common space" means an area on which more than one information function (e.g. symbol) may be displayed but not simultaneously.

3. APPLICATION FOR APPROVAL

- 3.1. The application for approval of a vehicle type with regard to the specification for controls, tell-tales and indicators shall be submitted by the manufacturer or his duly accredited representative.
- 3.2. It shall be accompanied by the following documents and particulars in triplicate:
- 3.2.1. a description of the vehicle type;
- 3.2.2. a list of items specified by this Regulation and prescribed by the manufacturer for the vehicle as controls, tell-tales or indicators;
- 3.2.3. graphical design of symbols identifying controls, tell-tales and indicators; and
- 3.2.4. drawings **and/or photographs** showing the layout of controls and location of the displays in the vehicle;
- 3.3. A vehicle **or representative part thereof** fitted with a complete set of controls, tell-tales and indicators, as prescribed in paragraph 3.2.2. above, representing the vehicle type to be approved shall be submitted to the technical service responsible for conducting approval evaluation.

~~3.4.~~

4. APPROVAL

- 4.1. If the vehicle type submitted for approval pursuant to this Regulation meets the requirements of the Regulation in respect of all the paragraphs specified in the list, approval of that vehicle type shall be granted.
- 4.2. An approval number shall be assigned to each type approved. Its first two digits (at present 00 for the Regulation in its original form) shall indicate the series of amendments incorporating the most

recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party shall not assign this number to another vehicle type or to the same vehicle type submitted with equipment not specified in the list referred to in paragraph 3.2.2. above, subject to the provisions of paragraph 6. of this Regulation.

- 4.3. Notice of approval or of extension or refusal of approval or production definitely discontinued of a vehicle type/part pursuant to this Regulation shall be communicated to the Parties to the 1958 Agreement applying this Regulation, by means of a form conforming to the model in annex 1 to this Regulation.
- 4.4. An international approval mark shall be affixed, conspicuously and in a readily accessible place specified on the approval form, to every vehicle conforming to a vehicle type approved under this Regulation. Such international approval mark shall consist of:
- 4.4.1. A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval 2/;
- 4.4.2. The number of this Regulation, followed by the letter "R", a dash and the approval number to the right of the circle prescribed in paragraph 4.4.1.
- 4.5. If the vehicle conforms to a vehicle type approved, under one or more other Regulations annexed to the Agreement, in the country which has granted approval under this Regulation, the symbol prescribed in paragraph 4.4.1. need not to be repeated; in such a case the Regulation and approval numbers and the additional symbols of all the Regulations under which approval has been granted in the country

2/ 1 for Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Yugoslavia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland, 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 Bulgaria, 35-36 (vacant) 37 for Turkey, 38-39 (vacant), 40 for the former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia and 46 for Ukraine. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify the Agreement concerning the Adoption for Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, or in which they accede to that Agreement, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement.

which has granted approval under this Regulation shall be placed in vertical columns to the right of the symbol prescribed in paragraph 4.4.1.

- 4.6. The approval mark shall be clearly legible and be indelible.
- 4.7. The approval mark shall be placed close to or on the vehicle data plate affixed by the manufacturer.
- 4.8. Annex 2 to this Regulation gives examples of arrangements of approval marks.

5. SPECIFICATIONS

A vehicle fitted with a control, a tell-tale or an indicator, listed in table 1 or **ISO 2575:2000 standard**, shall meet the prescribed requirements of this regulation for the location, identification, colour, and illumination of such control, tell-tale or indicator.

5.1 LOCATION

- 5.1.1. The controls to be used by a driver while driving the vehicle shall be located so that they are operable by this driver under the conditions of paragraph 5.6.2.
- 5.1.2. The tell-tales and indicators, listed in table 1, shall be located so that they are visible to a driver during night and day under the conditions of paragraphs 5.6.1. and 5.6.2. Tell-tales and indicators need not be visible when not activated.
- [5.1.3. **Notwithstanding paragraphs 5.1.1. and 5.1.2. a contracting party to this regulation may prescribe specific location requirements for certain controls, tell-tales and indicators.]**

5.2. IDENTIFICATION

- 5.2.1. **Where fitted**, the controls, tell-tales and indicators, listed in column 1 of table 1, shall be identified by symbols designated for them in column 2 of table 1. This requirement does not apply to the horn (an audible warning signal) control, when it is activated by a narrow ring-type control or by a lanyard.
- 5.2.2. To identify a control, a tell-tale or an indicator not included in table 1, the manufacturer may use a symbol */ of its own conception.

***/ A symbol may include internationally recognised alphabetic or numeric indications. All symbols used shall follow the design principles laid down in para. 4 of ISO 2575:2000.**

5.2.3. **If necessary** for clarity, supplementary symbols may be used in conjunction with any symbol specified in table 1 **or ISO 2575:2000**.

5.2.4. **Each** additional or supplementary symbol **used** by the manufacturer must not cause confusion with any symbol, word or abbreviation specified in this regulation. ****/**

****/ Manufacturers are required to use a symbol designated for the purpose in standard ISO 2575:2000 where one exists and where that symbol is suitable for the application concerned.**

5.2.5. The identifications shall be placed on or adjacent to the tell-tales, indicators and controls that they identify.

5.2.6. Where a control, an indicator or a tell-tale **for the same function** are combined, **one** symbol may be used for any such combination.

5.2.7. **The markings required by paragraph 5.2.1 shall be of such a size and reproduced with sufficient clarity as to be recognisable to the driver under the conditions defined in paragraph 5.6.**

5.2.8. Except as provided in S5.2.9, all identifications of tell-tales, indicators and controls listed in table 1 or table 2 must appear to the driver perceptually upright.

5.2.9. The identification of the following need not appear to the driver perceptually upright:

5.2.9.1. a master lighting switch, a headlamp or position lamp control that adjusts illumination of controls, tell-tales and indicators, by means of rotation,

5.2.9.2. a horn control,

5.2.9.3. any control, tell-tale or indicator located on the steering wheel, when the steering wheel is positioned for the motor vehicle to travel in other than a straight forward direction, and

5.2.9.4. any rotating control that does not have an off position.

~~5.2.10.~~

5.2.11. **Each control for the automatic transmission and each control for heating and air conditioning system(s)** shall have identification provided for each function of **each** such system.

5.2.12. **Each** control that regulates a system function over a continuous range shall have identification provided in word, number, symbol, colour **or other means** for the limits of the adjustment range of any such function.

If colour coding is used to identify the limits of the adjustment range of a temperature function, the hot limit shall be identified by the colour red and the cold limit by the colour blue.

~~5.2.13.~~

5.3. ILLUMINATION

- 5.3.1. The identifications of controls for which the word "Yes" is indicated in column 4 of table 1 shall be capable of being illuminated whenever the headlamps are activated. This does not apply to controls located on the floor, floor console, steering wheel, or steering column, or in the area of windscreen header, nor to controls for a heating and air-conditioning system if the system does not direct air directly upon the windscreen.
- 5.3.2. The indicators and their identifications for which the word "Yes" is indicated in column 4 of table 1 shall be illuminated whenever the ignition **or start** switch **is in the "on" or "start" position** and the headlamps are activated.
- 5.3.3. The indicators, their identifications and the identifications of controls need not be illuminated when the headlamps are being flashed or operated as daytime running lamps.
- 5.3.4. At the manufacturer's discretion any control, indicator or their identifications may be capable of being illuminated at any time.
- 5.3.5. A tell-tale shall not emit light except when identifying the malfunction or vehicle condition for whose indication it is designed or during a bulb check upon **propulsion system activation**.

[5.3.6. BRIGHTNESS OF ILLUMINATION OF CONTROLS AND INDICATORS

- 5.3.6.1. Means shall be provided for making the indicators, identifications of indicators and identifications of controls, that are listed in table 1, visible and recognisable to the driver under all driving conditions.
- 5.3.6.2. The means for providing the required visibility at night
- 5.3.6.2.1. shall be adjustable to provide at least two levels of brightness, at the lower of which the identification of controls, indicators and the identification of indicators are barely discernible to the driver who has adapted to dark ambient roadway condition;
- 5.3.6.2.2. may be operable manually or automatically; and
- 5.3.6.2.3. may have levels of brightness at which the identification of controls, indicators and the identification of indicators are not

visible nor recognisable to the driver who has adapted to dark ambient roadway conditions.

5.3.6.3. If the level of brightness is adjusted by automatic means to a point where the controls, indicators, and the identification of those items are not visible nor recognisable to the driver, under the conditions of paragraph 5.6.1, means shall be provided to enable that driver, under the conditions of paragraph 5.6.2, to restore the visibility and recognition.]

5.3.7. BRIGHTNESS OF TELL-TALE ILLUMINATION

Means shall be provided for making tell-tales and their identification visible and recognisable to the driver under all driving conditions.

~~5.3.7.2.~~

~~5.3.7.3.~~

5.4. COLOUR

5.4.1. Light of each tell-tale listed in table 1 shall be of the colour shown in column 5 of this table.

5.4.2. Indicators and tell-tales and identifications of indicators and controls not listed in table 1 may be of any colour chosen by the manufacturer, however, such colour must not interfere with or mask any tell-tale, control or indicator specified in table 1. **The colour to be selected shall follow the guidelines specified in para. 5 of ISO 2575:2000.**

5.4.3. Each symbol used for identification of tell-tale, control or indicator shall stand out clearly against the background.

5.4.4. The dark part of any symbol may be replaced by its outline.

5.5. COMMON SPACE FOR DISPLAYING MULTIPLE **INFORMATION**

5.5.1. A **common space** may be used to show **information** from any source, subject to the following requirements:

5.5.1.21. The tell-tales and indicators in the **common space** shall provide relevant information at the initiation of any underlying condition.

~~5.5.1.3.~~

5.5.1.42. When the underlying condition exists for actuation of two or more **tell-tales**, the **information** shall be either

- repeated automatically in sequence, or
 - indicated by visible means and capable of being selected for viewing by the driver under the conditions of paragraph 5.6.2.
- 5.5.1.13. The tell-tales for the brake system malfunction, headlamp driving beam, direction indicator **and seat belt** shall not be shown **in** the same **common space**.
- 5.5.1.4. **If tell-tales for the brake system malfunction, headlamp driving beam, direction indicator or seat belt are displayed in a common space they must displace any other symbol in such common space if the underlying condition exists for their activation.**
- 5.5.1.5. **Information** may be cancellable automatically or by the driver.
- 5.5.1.6. The colour requirements regarding tell-tales for engine oil pressure, [seat belt] and parking brake do not apply to those tell-tales and indicators appearing in a **common space**.
- 5.6. CONDITIONS
- 5.6.1. The driver has adapted to the ambient light conditions.
- 5.6.2. The driver is restrained by the **installed** crash protection **system**, adjusted in accordance with the manufacturer's instructions **and is free to move within constraints of that system**.
6. MODIFICATIONS OF THE VEHICLE TYPE OR OF ANY ASPECT OF SPECIFICATION FOR CONTROLS, TELL-TALES AND INDICATORS AND EXTENSION OF APPROVAL
- 6.1. Every modification of the vehicle type, or of any aspect of specification for controls, tell-tales and indicators, or of the list referred to in paragraph 3.2.2. above, shall be notified to the administrative department which approved that vehicle type. The department may then either:
- 6.1.1. Consider that the modifications made are unlikely to have an appreciable adverse effect and that in any case the vehicle still meets the requirements; or
 - 6.1.2. Require a further evaluation report from the technical services responsible for conducting the evaluation.
- 6.2. Confirmation or refusal of approval, specifying the alterations, shall be communicated by the procedure specified in paragraph 4.3. above to the Parties to the Agreement applying this Regulation.
- 6.3. The competent authority issuing the extension of approval shall assign a series number to each communication form drawn up for such

an extension and inform thereof the other Parties to the 1958 Agreement applying this Regulation by means of a communication form conforming to the model in annex 1 to this Regulation.

7. CONFORMITY OF PRODUCTION

The conformity of production procedures shall comply with those set out in the Agreement, appendix 2 (E/ECE/324-E/ECE/TRANS/505/Rev.2) with the following requirements:

7.1. A vehicle approved to this Regulation shall be so manufactured as to conform to the type approved by meeting the requirements set forth in paragraph 5. above.

7.2. The authority which has granted type approval may at any time verify the conformity control methods applied in each production facility. The normal frequency of these verifications shall be once every two years.

8. PENALTIES FOR NON-CONFORMITY OF PRODUCTION














8.1. The approval granted in respect of a type of vehicle pursuant to this Regulation may be withdrawn if the requirements are not complied with or if a vehicle bearing the approval mark does not conform to the type approved.





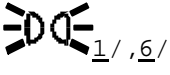
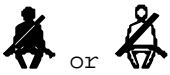


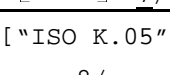





8.2. If a Party to the Agreement applying this Regulation withdraws an approval it has previously granted, it shall forthwith so notify the other Contracting Parties applying this Regulation by means of a communication form conforming to the example in annex 1 to this Regulation.






9. PRODUCTION DEFINITELY DISCONTINUED

If the holder of the approval completely ceases to manufacture a type of vehicle approved in accordance with this Regulation, he shall inform the authority which granted the approval. Upon receiving the relevant communication, that authority shall inform thereof the other Parties to the Agreement applying this Regulation by means of a communication form conforming to the example in annex 1 to this Regulation.

Table 1. Symbols, their illumination and colours.

No.	Column 1	Column 2	Column 3	Column 4	Column 5
	ITEM	SYMBOL <u>2/</u>	FUNCTION	ILLUMINATION	COLOUR
1.	Master lighting switch Tell-tale may not act as the tell-tale for the position (side) lamps.	 <u>1/</u>	Control	No	-
			Tell-tale <u>12/</u>	Yes	Green
2.	Headlamp high beams	 <u>1/</u>	Control	No	-
			Tell-tale	Yes	Blue
3.	Direction indicator	 <u>1/</u> , <u>3/</u>	Control	No	
			Tell-tale	Yes	Green
4.	Hazard warning signal	 <u>1/</u>	Control	Yes	
			Tell-tale <u>4/</u>	Yes	Red
5.	Front fog lamps	 <u>1/</u>	Control	No	
			Tell-tale	Yes	Green
6.	Rear fog lamp	 <u>1/</u>	Control	No	
			Tell-tale	Yes	Yellow
7.	Fuel level	 <u>1/</u> or 	Tell-tale	Yes	Yellow
			Indicator	Yes	
8.	Engine oil pressure	 <u>5/</u>	Tell-tale	Yes	Red
			Indicator	Yes	
9.	Engine coolant temperature	 <u>5/</u>	Tell-tale	Yes	Red
			Indicator	Yes	
10.	Electrical charging Condition		Tell-tale	Yes	Red
			Indicator	Yes	
11.	Windscreen wiping system (continuous)		Control	Yes	
12.	Power window lock		Control		

No.	Column 1	Column 2	Column 3	Column 4	Column 5
	ITEM	SYMBOL	FUNCTION	ILLUMINATION	COLOUR
13.	Windscreen washing system		Control	Yes	
14.	Windscreen washing and wiping system		Control	Yes	
15.	Windscreen defrosting and defogging system		Control	Yes	
			Tell-tale	Yes	Yellow
16.	Rear window defrosting and defogging system		Control	Yes	
			Tell-tale	Yes	Yellow
17.	Position, side marker, and/or end-outline marker lamps		Control	No	
			Tell-tale	Yes <u>6</u> /	Green
18.	Seat belt		Tell-tale	Yes	Red
19.	Airbag malfunction		Tell-tale	Yes	Yellow
20.	Side airbag malfunction		Tell-tale	Yes	Yellow
21.	Passenger Air bag off	["ISO K.05"] 	Tell-tale	Yes	Yellow
22.	Brake system malfunction may include Stop Lamp failure		Tell-tale	Yes	Red
23.	Antilock brake system malfunction		Tell-tale	Yes	Yellow
24.	Speedometer	km/h and MPH	Indicator	Yes	
25.	Parking brake applied		Tell-tale	Yes	Red
26.	Horn		Control	No	
27.	Engine on-board diagnostics or engine malfunction		Tell-tale	Yes	Yellow

No.	Column 1	Column 2	Column 3	Column 4	Column 5
	ITEM	SYMBOL	FUNCTION	ILLUMINATION	COLOUR
28.	Air Conditioning System	 or A/C	Control	Yes	
29.	Automatic (park) transmission (reverse) control (neutral) position (drive)	P R N D 10/	Indicator	Yes	
30.	Engine Stop	 11/	Control	Yes	
31.	Brake lining wear-out condition	 9/	Tell-tale	Yes	Yellow
32.	Heating and/or air conditioning fan	 or  1/	Control	Yes	
33.	Instrument panel illumination	["ISO ?."?"]	Control	No	
34.	Headlamp levelling	["ISO A.04"]	Control	No	

1/ Framed areas of the symbol may be solid.

2/ The symbols included in this Regulation are substantially identical to symbols described in the ISO 2575:2000 standard. Proportional dimensional characteristics specified in ISO 2575:2000 standard shall be maintained.

3/ The pair of arrows is a single symbol. When the controls or tell-tales for left and right turn operate independently, however, the two arrows may be considered separate symbols and be spaced accordingly.

4/ Not required when arrows of turn signal tell-tales that otherwise operate independently flash simultaneously as hazard warning tell-tale.

5/ Combination of the engine oil pressure symbol and the engine coolant temperature symbol in a single tell-tale is permitted.

6/ Separate identification not required if function is combined with master lighting switch.

7/ If a single tell-tale is used to indicate an air-bag malfunction, the air-bag malfunction symbol must be used.

8/ Contracting Parties which, at the date of coming into force of this Regulation, allowed or required the use of text for this function may, until [sixty months] after the date of coming into force of this Regulation, continue to allow or require the text in addition to the prescribed symbols for vehicles to be registered in their country.

9/ If a single tell-tale is used to indicate more than one brake system condition, the brake system malfunction symbol must be used.

10/ Letter "D" may be replaced or supplemented by other alphanumeric character(s) or symbol(s) chosen by the manufacturer to indicate additional selection modes. The indicators may be displayed vertically (top to bottom as shown) or

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horizontally (left to right).

11/ Use when engine control is separate from the key locking system.

12/ **Not required if instrument panel lights are lit automatically on activation of the master lighting switch.**
