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INLAND TRANSPORT COMMITTEE

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Working Party on General Safety Provisions (GRSG) (Eighty-first session, 8-11 October 2001, agenda item 11.1.)

PROPOSAL FOR A NEW DRAFT REGULATION:
UNIFORM PROVISIONS CONCERNING THE APPROVAL OF VEHICLES WITH REGARD TO THE

SPECIFICATIONS FOR LOCATION AND IDENTIFICATION OF HAND CONTROLS, TELL-TALES

AND INDICATORS

# Transmitted by the Expert from Canada

Note: The text reproduced below was prepared by the experts from Canada and  $\overline{\text{OICA}}$  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.4 and informal document No. 5 submitted by OICA.

 $\underline{\text{Note}}$ : This document is distributed to the Experts on General Safety Provisions  $\underline{\text{only}}$ .

GE.01-

# Regulation No. XXX

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF VEHICLES WITH REGARD TO THE SPECIFICATIONS FOR LOCATION AND IDENTIFICATION OF CONTROLS, TELL-TALES AND INDICATORS / ISO /

### 1. SCOPE

This Regulation applies to identification of hand controls, telltales and indicators in vehicles of categories M and N 1/2. It specifies requirements for the location, identification, colour, and illumination of motor vehicle hand 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. / edit /

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 a device that shows the magnitude of the physical characteristics that the instrument is designed to sense.
- 2.4. "Common space" means an area on which two or more information function (e.g. symbol) may be displayed but not simultaneously.
- 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. "Adjacent" means that no control, display tell-tale, indicator, or
   other potential source of distraction appears between the
   identifying symbol and the tell-tale, indicator, or control which
   that symbol identifies. / edit /
- 2.7. "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.
- 2.8. "Vehicle type" means motor vehicles, which do not differ in respect of the internal arrangements, which may affect the identification

<sup>1</sup>/ 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).

of symbols for controls, tell-tales, and indicators and operation of controls.

- 2.9. "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.
- 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 tell-tales and indicators in the vehicle;
   / edit /
- 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.
- 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.

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- 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 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

2

<sup>2/ 1</sup> 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.

- 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 <a href="mailto:and-recognisable">and recognisable</a> 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 or recognisable when not activated. / in lieu of deleted para. 5.2.7. /
- 5.1.3. The identifications of tell-tales, indicators and controls shall

  be placed on or adjacent to the tell-tales, indicators and

  controls that they identify. / moved from para. 5.2.5. / In the

  case of a multifunction control, the identification need not be

  immediately adjacent. /OICA /
- [ 5.1.43. Notwithstanding paragraphs 5.1.1., and 5.1.2. and 5.1.3. the tell-tale for "passenger air bag off", if fitted, must be located within the interior of the vehicle and forward of and above the design H-point of both the driver's and the right front passenger's seat in their forwardmost seating positions. The tell-tale which alerts front seat occupants that the passenger side air bag is switched off must be visible to the driver and right front passenger under all driving conditions and shall not be located on or adjacent to a surface that can be used for temporary or permanent storage where use of the storage space could obscure the telltale from either the driver's or right front passenger's view. ]

/ must be transmitted to GRSP /

- 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. Control, tell-tale or indicator not listed in table 1 shall be identified by symbol designated for the purpose in standard ISO 2575:2000 where one exists and where that symbol is suitable for the application concerned.
- 5.2.2. To identify a control, a tell-tale or an indicator not included in table 1 or ISO 2575:2000, the manufacturer may use a symbol of its own conception. Such symbol may include internationally recognised alphabetic or numeric indications. All symbols used shall follow the design principles laid down in paragraph 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. /OICA/

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

  / moved to new para. 5.1.3. /
- 5.2.56. Where a control, an indicator or a tell-tale for the same function are combined, one symbol may be used to identify 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 paragraphs 5.6.1. and 5.6.2. /the concept moved to para. 5.1.2. /
- 5.2.68. Except as provided in paragraph 5.2.9., all identifications of tell-tales, indicators and controls listed in table 1 or ISO 2575:2000 must appear to the driver perceptually upright. In case of rotating control, this paragraph applies to it when such control is in its "off" position.
- 5.2.79. The identification of the following need not appear to the driver perceptually upright:
- 5.2.79.1. a horn control,
- 5.2.79.2. 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
- 5.2.79.3. any rotating control that does not have an off position.
- 5.2.810. Each control for the automatic vehicle speed system (cruise control) and each control for heating and air conditioning system(s) shall have identification provided for each function of each such system.
- 5.2.911. When fitted each control that regulates a system function over a continuous range shall have identification provided 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.

  If the status or limit of a function is shown by an indicator separated from and not adjacent to the control for that function, both the control and the indicator must be independently identified in compliance with paragraph 5.1.3.2.5. / edit /
- 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, or 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 device which starts and/or stops the engine is in a position

which makes it possible for the engine to operate 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
- 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; and
- 5.3.6.2.2. may be operable manually or automatically.
- 5.3.7. BRIGHTNESS OF TELL-TALE ILLUMINATION
- 5.3.7.1. Means shall be provided for making tell-tales and their identification visible and recognisable to the driver under all driving conditions.

- 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 the identification of any tell-tale, control, or indicator specified in table 1. The colour to be selected shall follow the guidelines specified in paragraph 5 of ISO standard 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:
- 5.5.1.1. The tell-tales and indicators in the common space shall provide relevant information at the initiation of any underlying condition.
- 5.5.1.2. 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.
- 5.5.1.3. 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-tale for the brake system malfunction, headlamp driving beam, direction indicator or seat belt is displayed in a common space it must displace any other symbol in such common space if the underlying condition exists for its activation.
- 5.5.1.5. With the exception of tell-tales for the brake system malfunction, headlamp driving beam, direction indicator or seat belt, the 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 when those tell-tales appear in a common space.

  Unless prescribed in a specific Regulation, the colour requirements regarding tell-tales do not apply when tell-tales appear in a common space. / OICA /
- 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.

### **FEAT BELT TELL-TALE**

- 5.7.1. The seat belt assembly provided at the driver's seating position—
  shall be equipped with a warning system that, at the option of themanufacturer, either:
- 5.7.1.1. Activates a continuous or flashing telltale visible to the driver displaying the identifying symbol for the seat belt telltale shown in table 1, for not less than 60 seconds (beginning when the vehicle propulsion system activation switch is moved to the "on" or the "start" position) when condition described in paragraph 5.7.2. exists simultaneously with condition described in paragraph 5.7.3.,
- 5.7.1.2. Activates, for a period of not less than 4 seconds and not more than 8 seconds (beginning when the vehicle propulsion system activation switch is moved to the "on" or the "start" position), a continuous or flashing warning light visible to the driver, displaying the identifying symbol of the seat belt telltale shown in table 1 when condition described in paragraph 5.7.2. exists.
- 5.7.2. The vehicle propulsion system's activation switch is moved to the "on" position or to the "start" position.
- 5.7.3. The driver's lap belt is not in use, as determined, at the option of the manufacturer, either by the belt latch mechanism not being fastened, or by the belt not being extended at least 4 inches from its stowed position. ]

  / the text of this paragraph should be transmitted to GRSP /
- 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.

# 10. NAMES AND ADDRESSES OF TECHNICAL SERVICES RESPONSIBLE FOR CONDUCTING APPROVAL TESTS AND OF ADMINISTRATIVE DEPARTMENTS

The Parties to the 1958 Agreement applying this Regulation shall communicate to the United Nations Secretariat the names and addresses of the technical services responsible for conducting approval tests and of the administrative departments which grant approval and to which forms certifying approval or extension or refusal or withdrawal of approval, issued in other countries, are to be sent.

# Annex 1

# COMMUNICATION

(Maximum format: A4 (210  $\times$  297 mm))

|   |                   |  | issued by:       |             |                   |  |
|---|-------------------|--|------------------|-------------|-------------------|--|
| concer  | rning: <u>2</u> / | APPROVAL GRANTED APPROVAL EXTENDED APPROVAL REFUSED APPROVAL WITHDRAWN PRODUCTION DEFINITELY | DISCONTINUED     |             |                   |  |
| of a type of vehicle with regard to the location and identification of motor vehicle hand controls, tell-tales and indicators, pursuant to Regulation No. $xxx$ .   |                   |  |                  |             |                   |  |
| Approval No Extension N   |                   |  |                  |             |                   |  |
| 1. Trade name or mark of the vehicle:  2. Manufacturer's name for the type of vehicle:  3. Manufacturer's name and address:  4. If applicable, name and address of the manufacturer's representative:  5. Submitted for approval on:  6. Technical service responsible for conducting approval tests:  7. Date of test report:  8. Number of test report: |                   |  |                  |             |                   |  |
| 9.  | Concise des       | cription:<br>cols, tell-tales and in   | odiantora on t   | ho wohialo: | Conformance:      |  |
|   | Hand Conti        | ors, terr-tares and in   | idicators on the | me venicie. | conformance:      |  |
| 9.1.  |                   |  |                  |             | yes/no <u>2</u> / |  |
| 9.2.  |                   |  |                  |             | yes/no <u>2</u> / |  |
|   |                   |  |                  |             | yes/no <u>2</u> / |  |

| Informal    | document No.                         |
|-------------|--------------------------------------|
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| 10. | Comments  |
|-----|---|
|     |   |
|     |   |
|     |   |
|     |   |
| 11. | Position of the approval mark:  |
| 12. | Reason(s) for extension (if applicable):  |
|     |   |
| 13. | Approval granted/extended/refused/withdrawn $\underline{2}$ /                               |
| 14. | Place:  |
| 15. | Date:   |
| 16. | Signature:  |
| 17. | The following documents, bearing the approval number shown above, are available on request: |
|     |   |
|     |   |
|     |   |
|     |   |

<sup>1/</sup> Distinguishing number of the country which has granted, extended, refused or withdrawn approval (see approval provisions in the Regulation).

 $<sup>\</sup>underline{2}$ / Strike out what does not apply.

### Annex 2

#### ARRANGEMENTS OF APPROVAL MARKS

### Model A

(See paragraph 4.4. of this Regulation)

a = 8 mm min.

The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to the installation of lighting and light-signalling devices, been approved in the Netherlands (E4) pursuant to Regulation No. 48  $\frac{1}{2}$ / as amended by the 02 series of amendments. The approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 48 as amended by the 02 series of amendments.

### Model B

(see paragraph 4.5. of this Regulation)

a = 8 mm min.

The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in the Netherlands (E4) pursuant to Regulation No. 48  $\underline{1}/$  as amended by the 02 series of amendments and Regulation No. 33.  $\underline{1}/$  The approval number indicates that, at the dates when the respective approvals were given, Regulation No. 48 was amended by the 02 series of amendments and Regulation No. 33 was still in its original form.

<sup>1/</sup> The numbers are given merely as an example.