



Informal document N° 16
(80th GRSG, 2-6 April 2001
agenda item 11.2)

OICA COMMENTS

ON THE PROPOSED DRAFT NEW REGULATION REGARDING CONTROLS, TELL-TALES AND INDICATORS

Document TRANS/WP29/GRSG/1999/19/Rev.3

It is essential that the requirements are restricted to safety-related controls and displays and that manufacturers are left free to innovate. Comments on specific paragraphs are as follows.

Paragraph 1 - Scope

The 79th GRSG agreed that this should be amended to read (footnote 1/ is maintained):

"This Regulation applies to identification of manual controls, tell-tales and indicators in vehicles of categories M1 and N1 1/."

We support this position with the exception that, in the above definition, for "manual controls" we would prefer the term "hand controls".

Paragraph 2.1

Only hand-operated controls should fall within the scope of this Regulation. To avoid the need to repeat this every time a control is mentioned, the definition should be amended as follows:

*"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."*

Redundant references can be then deleted throughout the document.

Paragraph 3.2.4, read:

"drawings and/or photographs showing the layout of controls and location of the displays in the vehicle;"

Paragraph 3.3, amend to read:

"A vehicle or representative part thereof fitted with a" (Improved version of text agreed by 79th GRSG)

Paragraph 3.4

Delete. Duplicates 4.3.

Paragraph 5

- (a) Delete **all** references to Table 2 throughout the draft. Only the items listed in Table 1 should be subject to compliance with the detailed requirements. We have grave doubts about the value of including Table 2 in the document at all, as this will hinder development of new and improved symbols and will require constant updating to avoid conflict with ISO2575, which in its latest edition (2000) now lists about 160 symbols.
- (b) Delete “*or part of a vehicle*”. This text only relate to approval of a vehicle and has no provision for component approval.

Paragraph 5.1.1

Delete. Control reach cannot be defined subjectively as proposed in this paragraph and in para. 5.6.2. Manufacturers routinely apply the latest ergonomic/human-machine interface principles to cab design, including control reach, as such matters are a significant factor in customer product satisfaction.

Paragraph 5.1.2

Delete. Similarly, control visibility requires the definition of eye-points representing a specific percentile and questions such as control adjustment and permitted head movement. Manufacturers routinely apply the latest ergonomic/HMI principles to cab design, including control visibility, as such matters are a significant factor in customer product satisfaction.

Paragraph 5.1.3

Delete. This provision is incompatible with the principles of mutual acceptance of approval and must be deleted.

Paragraph 5.2.1, read:

“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.”

This should not require fitment of controls, etc., which are not necessary or not required by other regulations. See comment 5 above regarding Table 2.

Paragraph 5.2.2, read:

*“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 (see Para. 5.2.4).*

***/ A symbol may include internationally recognised alphabetic or numeric indications. All symbols used should follow the design principles laid down in ISO 2575 paragraph 4.”*

See comment 5 above regarding Table 2. Use of text (words and abbreviations) should be discouraged for language reasons unless such text has wide recognition in all major languages.

Paragraph 5.2.3, read:

"If necessary for clarity, supplementary symbols may be used in conjunction with any symbol specified in table 1 (see Para. 5.2.4)."

See comment 5 above regarding Table 2. Use of text (words and abbreviations) in symbols should be discouraged for language reasons unless such text has wide recognition in all major languages.

Paragraph 5.2.4, read:

*"Any additional or supplementary symbol used by the manufacturer must not cause confusion with any symbol specified in this regulation. ***/"*

****: If possible, manufacturers are recommended to use a symbol designated for the purpose in standard ISO 2575 where one exists and where that symbol is suitable for the application concerned."*

Deleted *"word or abbreviation"* as a word or abbreviation is a symbol in the context of this Regulation – see 5.2.2. Replaced *"created"* by *"used"*. Added footnote.

Paragraph 5.2.5

See 2.1.

Paragraph 5.2.6

Delete. Unnecessary to say this.

Paragraph 5.2.7, read:

"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."

Although the intent of this paragraph is apparent, it should be replaced by a clearer text as above. Inevitably, this will have to be a subjective judgment and will depend on the visual acuity of the examiner taking the place of the driver. However, it is difficult to devise an alternative without specifying a minimum symbol size.

Paragraphs 5.2.8 to 5.2.12

Delete. These proposals are excessively design restrictive and could impede development of new control/markings solutions.

Paragraph 5.2.13

Delete and replace by footnote to Table 1 Heading (see proposal below).

Paragraph 5.3.5

For *"vehicle starting"* read *"vehicle propulsion system activation"* to clarify intent and cover electric vehicle applications.

Paragraphs 5.3.6. to 5.3.7

Delete.

Justification:

- ◆ Paragraph 5.3.6.1: See 2.1 above and 5.3.7.1 below.
- ◆ Paragraphs 5.3.6.2.1 to 5.3.6.3: We do not see any justification for a mandatory requirement for two levels of night-time illumination. Manual adjustment of illumination is likely to be abused. We would support instead a single mandatory level of night-time illumination which enables clear vision of the symbols without adversely affecting night ambient adaptation, with the option of adjustable illumination (automatically reset to nominal when the engine is restarted). If a requirement was retained, it would have to be precisely defined in terms of measurable parameters. The present text is too open to interpretation to be workable. The equivalent US FMVSS requirement on which the proposal is based is a source of constant problems for manufacturers requiring extensive subjective evaluations and thus wasting a lot of valuable development resource.
- ◆ Paragraph 5.3.7.1: "All driving conditions" is an unrealistic requirement and impossible to test. However bright the illumination is, it will be difficult or impossible to see it if the instrument panel is bathed in strong direct sunshine.
- ◆ Paragraph 5.3.7.2: We do not see any justification for a mandatory requirement for adjustable day-time illumination. Manual adjustment of illumination is likely to be abused.
- ◆ Paragraph 5.3.7.3: As vehicles equipped with integrated daytime running headlamps systems have their headlamps illuminated at all times, there is no reason for a tell-tale and use of the headlamp beam tell-tale permanently lit would jeopardise bulb life. Illuminating the headlamp tell-tale, even at reduced illumination, would provide a false signal to the driver which could result in failure to illuminate headlamps at night.

Paragraph 5.4.1, read:

"Each tell-tale light shall be of the colour (in accordance with ISO 2575) shown in column 5 of table 1."

Photochromatic co-ordinates should ideally be specified for the colours to be used, but this would involve excessive testing. Reference to ISO2575 should avoid confusion caused by footnote 1) to the table referring to red-orange and green-blue.

Paragraph 5.4.2, read:

"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 should follow the guidelines specified in ISO 2575 Para. 5."

Paragraph 5.4.4, read:

"The dark part of any symbol in table 1 may be replaced by its outline."

See general comment under 5. above.

Paragraph 5.5

It is necessary to define "Message". Does this mean text messages, symbols, or a combination of both? The new regulation should take account both of the virtual instrument panel, where all instrument representations, tell-tales and other, innovative displays may appear on a single display screen, and of intermediate stages where one or more displays appear on a multi-function screen.

Paragraphs 5.5.1.1 to 5.5.1.4

Renumber to 5.5.1.4, 5.5.1.1 to 5.5.1.3 respectively. Logically, 5.5.1.1 should appear after 5.5.1.4.

Paragraph 5.5.1.1 (old), read:

"If the tell-tales for the brake system malfunction, headlamp driving beam, and direction indicator are shown by the same information display device, these symbols shall, when two or more are displayed, be simultaneously displayed and clearly distinguishable."

This paragraph assumes that the information display device is only capable of displaying one message at a time. With high definition graphics screens, it should be quite possible to simultaneously display tell-tales for the headlamps, direction indicators, etc., as well as any other messages.

Paragraph 5.5.1.2 (old)

Delete. As written it is too restrictive; impossible to comply with when two or more simultaneous underlying conditions occur and requires an existing serious condition indicator to be replaced by any other indicator at initiation of underlying conditions.

Paragraph 5.5.1.3 (old)

Delete. This requirement is of no value as the majority of countries do not require use of any seat belt tell-tale. Before inclusion here, any requirement for a seat belt warning and its mode of operation should be agreed in the context of ECE Regulation 16.

Paragraph 5.6.1

Delete. This is too vague. Is it day ambient, or night ambient? Sodium, tungsten, fluorescent tube or mercury lighting? A specific lighting condition needs to be specified if we are to have a level playing field. What visual acuity should the examiner have?

Paragraph 5.6.2

Delete. See 5.1.1.

TABLE 1

Title, read: *"Table 1. Symbols, their illumination and colours, if the item concerned is fitted on a vehicle."*

Heading, Column 2, add footnote : *"*/ The symbols included in this regulation are substantially identical to symbols described in the ISO 2575 standard. Proportional dimensional characteristics specified in ISO 2575 standard shall be maintained."* Based on paragraph 5.2.13, simplified in line with proposal to use ISO symbols throughout.

The items should be numbered for ease of reference. Terminology should be aligned throughout with the related ECE Regulations (e.g. "turn signals" should read "direction indicators" in line with ECE-6 and ECE-48).

Master Lighting Switch: The dividing line in Columns 1 and 2 below the title should be deleted. Add footnote to tell-tale: "Not required if instrument panel lights are lit automatically on activation of the master lighting switch."

Headlamp levelling: Insert after "Headlamp" with ISO symbol A.04 as required by ECE Regulation 48 and with footnote on variations in accordance with that Regulation.

Hazard warning signal: Delete control colour. Only tell-tale colour should be specified.

Front fog lamp: Delete control illumination. Control frequently incorporated in Master Lighting Switch.

Rear fog lamp: Delete control illumination. Control frequently incorporated in Master Lighting Switch.

Position lamps: In columns 3 to 5, insert:

<i>"Control</i>	<i>No</i>	<i>-</i>
<i>Tell-tale</i>	<i>Yes</i>	<i>6/ Green"</i>

Rear window defrosting and defogging system: The dividing line in Columns 1 and 2 below the title should be deleted.

Airbag malfunction: Colour should be yellow, not red. This is not a "Stop the vehicle!" fault.

Side airbag malfunction: Colour should be yellow, not red, as above. It should be specified that it is permissible for one tell-tale, marked with the "airbag malfunction" symbol above, to combine both front and side airbag malfunction roles. Delete reference to footnote 7 (but retain footnote – see below) as this symbol is understood to have been approved by ISO as symbol 7000-2561, although not yet published in ISO 2575.

Passenger air bag off: The proposed symbol is unacceptable. It is too fussily detailed and contains text. The proposed ISO symbol K.05 should be used in line with GRSP discussion.



Brake system malfunction: Delete word BRAKE. See also Footnote 8 below. Delete reference to stop lamp failure.

Antilock brake system malfunction: Delete "or variable brake proportioning system malfunction".

Antilock brake system malfunction in tow vehicle: This function is covered by the preceding generic ABS warning symbol. Delete.

Antilock brake system trailer fault: This symbol should be replaced by ISO 2575:2000 symbols B.06 (first trailer) and B.07 (second or subsequent trailer, if any).

Speedometer: km/h must be lower case under SI Units rules.

Daytime running lights: Delete (see 5.3.7.3 above). If any function is retained, footnote 6 should apply.

Engine On-board Diagnostics: This symbol (ISO symbol F.01) simply means "Engine" and should not be given this specific meaning. Use ISO symbol F.02 ("Engine malfunction") instead with footnote "This symbol shall be used on the engine on-board diagnostic system tell-tale (where fitted) or any other propulsion system fault tell-tale."

Heating system: It is more common to use ISO symbol D.02 (fan) rather than D.03 (convention arrows). Both symbols should be specified as alternatives.

Footnote 1: Delete. See 5.4.1 above.

Footnote 7, amend to read: *"7/ Symbol not yet fully approved by ISO. If ISO approves a different symbol for inclusion in ISO standard 2575 for this function, that symbol shall be accepted as an alternative at the request of the manufacturer."* This footnote should appear against "power window lock" and "passenger air bag off" only.

Footnote 8: As written, this would require countries that do not require or accept English language text markings to temporarily introduce such a requirement where vehicles were approved to the ECE Regulation. This is unacceptable. Replace footnote 8 by: *"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 do allow or require the text in addition to the prescribed symbol for vehicles to be registered in their country."*

Footnote 10: The number of different gearshift options is growing. There is need for greater flexibility than provided for in the proposed text. We propose the following text: *"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 indications may be displayed vertically (top to bottom as shown) or horizontally (left to right)."*

TABLE 2

See general comment under 5. above. Delete. However, If GRSG agrees to retain Table 2, we should request time for a further detailed review before it can be agreed to.
