OICA comments to GRE-70-09

Proposal for Supplement [...] to the 06 Series of amendments to Regulation No. 48 (Installation of lighting and light-signalling devices)

The text reproduced below was prepared by the expert from the Netherlands in order to introduce the following into Regulation No. 48:

- (a) General definition of 'tell-tale', as also currently defined in Regulation No. 121;
- (b) Requirement that the specifications of the tell-tale (location, identification, symbol, illumination and colour) shall meet the relevant requirements of Regulation No. 121;
- (c) Provision that tell-tales shall always provide an optical signal, thus aligning with Regulation No. 121; however, it is suggested to allow additional signals (auditory or any equivalent signal);
- (d) New definition of a 'failure tell-tale' and stating the mandatory presence of such tell-tale for the daytime running lamp in certain cases:
- (e) Editorial changes clarifying the situation for a few other cases in Regulation No. 48, where apparently also a 'failure tell-tale' was meant.

This proposal is complemented by proposals for Regulation No. 87 and Regulation No. 7, contained in informal documents GRE-70-10 and GRE-70-11 respectively. The modifications to the existing text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

I. Proposal

Paragraph 2.18., amend to read:

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

Comment [OICA1]: It should read "activation"

2.18.1 "Operating tell-tale" means an optical or auditory signal (or any equivalent signal) indicating that a device has been switched on and is operating correctly or not.

2.18.2 "Closed-circuit tell-tale" means an optical signal indicating that a device has been switched on, but not indicating whether it is operating correctly or not.

2.18.3 "Failure tell-tale" means an optical signal indicating that a device is not operating correctly. It shall remain activated while the failure is present. It may be cancelled temporarily, but shall be repeated whenever the device, which starts and stops the engine, is switched on and off."

Comment [OICA2]: To avoid contradiction with para. 6.5.8, for example

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Comment [OICA3]: This new requirement requires the vehicle to "self-check" the direction indicator function when "the device that starts the engine" is switched on. This is a major technical change and requires an appropriate update to Regulation No.48.

Deleted:;

Paragraph 5.13., amend to read:

"5.13. Tell-tale

The specifications of the tell-tale (location, identification, symbol, illumination and colour) shall meet the relevant requirements for tell-tales given in paragraph 5 of Regulation No. 121.

Where a closed-circuit tell-tale or a failure tell-tale is prescribed by this Regulation it may be replaced by an "operating" tell-tale, unless otherwise stated.

In addition to the required optical signal, an auditory signal (or any equivalent signal, e.g. text message) may also be given. "

Paragraph 6.2.8.2, amend to read:

"6.2.8.2. A visual failure tell-tale [, whether flashing or not,] is mandatory:

Comment [OICA4]: Clarification needed on such deletion

- In the case where the whole beam or the kink of the elbow of the cut-off is moved to produce bend lighting; or
- (b) If one or more LED modules are used to produce the principal dipped-beam. It shall be activated:
- It shall remain activated while the failure is present. It may be cancelled temporarily, but shall be repeated whenever the device, which starts and stops the engine, is switched on and off. (a)

 In the event of a malfunction of the displacement of the kink of the elbow of the cut-off; or
- (b) In case of a failure of any one of the LED module(s) producing the principal dippedbeam.

"

Paragraph 6.5.8., amend to read:

"6.5.8. Tell-tale

Operating tell-tale mandatory for direction-indicator lamps of categories 1, 1a, 1b, 2a and 2b. It may be visual or auditory or both. If it is visual it shall be a flashing light which, at least in the event of the malfunction of any of these direction-indicator lamps, is either extinguished, or remains alight without flashing, or shows a marked change of frequency. If it is entirely auditory it shall be clearly audible and shall show a marked change of frequency, at least in the event of the malfunction of any of these direction-indicator lamps.

It shall be activated by the signal produced according to paragraph 6.4.2. of Regulation No. 6 or another suitable way. 13/

If a motor vehicle is equipped to draw a trailer, it shall be fitted with a special visual operational failure tell-tale for the direction-indicator lamps on the trailer unless the tell-tale of the drawing vehicle allows the failure of any one of the direction-indicator lamps on the vehicle combination thus formed to be detected.

For the optional direction-indicator lamps on motor vehicles and trailers, operating tell-tale shall not be mandatory. "

Paragraph 6.7.8., amend to read:

"6.7.8. Tell-tale

Tell-tale optional; where fitted, this tell-tale shall be an operating failure tell-tale consisting of a non-flashing warning light which comes on in the event of the malfunctioning of the stop lamps. An operating tell-tale is not allowed.

However, a failure tell-tale is mandatory in case a note in the communication form of the stop lamp states that the lamp is only for use on a vehicle fitted with such tell-tale."

Paragraph 6.13.8., amend to read:

"6.13.8. Tell-tale

Tell-tale optional. If it exists, its function shall be carried out by the tell-tale required for the front and rear position lamps.

However, an operational tell-tale is mandatory in case a note in the communication form of the end-outline marker lamp states that the lamp is only for use on a vehicle fitted with such tell-tale."

Paragraph 6.19.8., amend to read:

"6.19.8. Tell-tale

Closed-circuit tell-tale optional

Comment [OICA5]: Please see above proposal for para. 2.18.1

Comment [OICA6]: It should better read "separate"

Comment [OICA7]: This word should have been deleted

Comment [OICA8]: This new requirement is currently not technically feasible when a trailer is fitted with LED direction indicators (12V).

- Today there are already manufacturers designing vehicles to R48.06 for introduction in calendar year 2017, therefore such a proposal as a supplement to R48.06 would create problems, especially as there is a new requirement for towing vehicles requiring a
- failure' tell tale to cope with any towed trailer.

 -Furthermore there are a number of options from a trailer design perspective that will lead to different electrical loads being applied to the vehicle once connected in the combination. It is impossible for a
- vehicle to cater for all these options.
 a "special visual operational" tell-tale is not defined in R-48.
- Some passenger car manufacturer's include an instruction in the owners handbook to inform drivers that they should NOT tow trailers with LED direction indicators
- For HGVs (24v) this new requirement is currently covered with an operating tell-tale by some manufacturers. If the trailer is fitted with LED direction indicators a specific technical solution is required to detect failure.

Comment [OICA9]:

Not necessary – see definition of failure tell-tale

Comment [OICA10]: This should be "operating"

Deleted: a failure

However, a failure tell-tale is mandatory in case a note in the communication form of the daytime running lamp states that the lamp is only for use on a vehicle fitted with such tell-tale."

Paragraph 6.22.8.2., amend to read:

"6.22.8.2. A visual failure tell-tale for AFS is mandatory. It shall be non-flashing. It shall be activated whenever a failure is detected with respect to the AFS control signals or when a failure signal is received in accordance with paragraph 5.9. of Regulation No. 123. It shall remain activated while the failure is present. It may be cancelled temporarily, but shall be repeated whenever the device which starts and stops the engine is switched on and off."

II. Justification

- 1. During the 69th session of GRE the expert from the Netherlands presented document ECE/TRANS/WP.29/GRE/2013/2, which proposed to also state the mandatory requirement for an 'operating tell-tale' for the daytime running lamp, in the case the failure provision for the light sources according to paragraph 7.4.2.(b) of Regulation No. 87 is applied. However, he noted that probably only a 'failure tell-tale' rather than an 'operating tell-tale' was envisaged, but pointed out that the current Regulation No. 48 does not incorporate a definition of such 'failure tell-tale'.
- 2. There also was a general discussion about the specification of the tell-tales in R.48, like symbols, colours, etc. and the relationship vis-à-vis Regulation No.121.
- 3. Consequently, GRE invited the expert from the Netherlands to revise the proposal, including a new definition for such a 'failure tell-tale', and agreed to resume consideration on the basis of a revised document at its 70^{th} session.
- 4. This proposal effectively contains five changes:
- (a) An introduction of the general definition of 'tell-tale', as currently defined in Regulation No. 121.
- (b) Requiring that the specifications of the tell-tale (location, identification, symbol, illumination and colour) shall meet the relevant requirements of Regulation No. 121.
- (c) Requiring that tell-tales shall always provide an optical signal, thus aligning with Regulation No. 121; however, it is suggested to also allow additional signals (auditory or any equivalent signal), unless otherwise stated
- (d) An introduction of a new definition of a 'failure tell-tale' and stating the mandatory presence of such tell-tale for the daytime running lamp in certain cases.
- (e) Clarifying the situation for a few other cases in Regulation No. 48, where apparently also a 'failure tell-tale' was meant.
- 5. Furthermore, Regulation No. 48 in fact already uses the wording 'failure tell-tale' for quite some years now, in paragraph 6.22.8.2. (AFS):
- 6.22.8.2. A visua failure tell-tale or AFS is mandatory. It shall be non-flashing. It shall be activated whenever a failure is detected with respect to the AFS control signals or when a failure signal is received in accordance with paragraph 5.9. of Regulation No. 123. It shall remain etc. etc.
- 6. Finally, complementary proposals to change the wording 'operating tell-tale' to 'failure tell-tale' in paragraph 7.4.2.(b) of Regulation No. 87 and to add clarifying wording to paragraph 6.1.7.2. of Regulation No. 7 that in case of stop lamps a 'failure tell-tale' is meant, can be found in informal documents GRE-70-10 and GRE-70-11 respectively.