Informal Document No. **GRSG-97-14** (97th GRSG, 20 – 23 October 2009, agenda item 14 (a))

COMMENTS ON THE PROPOSAL FOR A GTR ON MOTORCYCLE CONTROLS, TELL-TALES AND INDICATORS

Note: The text reproduced below was prepared by the expert from the European Commission in order to give comments on informal document GRSG-96-34 as well as document ECE/TRANS/WP.29/2006/74 which has served as the basis of the Commission's remarks. The European Commission wishes to note that all efforts made to achieve a Global Technical Regulation regarding this subject are regarded as very welcome.

A COMMENTS

Vehicle Application:

All Category 3 vehicles (i.e. two-wheeled moped, three-wheeled moped, two-wheeled motorcycle, tricycle, motorcycle with side car) [as well as quadricycles].

JUSTIFICATION: The scope should not be limited to "motorcycles used on public roads".

General Requirements:

After first sentence add: "Specifically controls that are operated during normal vehicle operation (including start-up and after start-up operations) while running, driving and riding, shall be within reach as well as visible to the operator."

JUSTIFICATION: This is to avoid the choke/enricher control and other controls to be hidden underneath for instance the tank and only being able to operate it by tactile recognition. Switches and controls that are operated before start-up and after shutdown, or that are not operated during normal operation (eg. fuel tank supply valve switching to reserve, ignition on/off) can remain to be positioned as the manufacturer deems appropriate.

Change: "Controls on the handlebars..." to read: "When controls are placed on a handlebar, they..."

Change: "...normal operating position..." to: "... normal operating position with the vehicle pointing straight ahead, shall be clearly visible and..."

Add: "The orientation of symbols must correspond to that as indicated in the figures of this Regulation and/or ISO standard and must be perceptually upright from the operator's point of view."

JUSTIFICATION: Clarification of the text and requirements.

Color of Tell-tale Lights:

The word "Amber" should in all cases be changed into "Yellow".

JUSTIFICATION: Bring in line with Regulation No. 121

Also, wording should be added to underline the fact that inappropriate colours may not be applied (eg. red for cruise control engagement, red for ABS malfunction).

JUSTIFICATION: This is to bring in line the perception of danger with actual danger levels. Engaging for instance a cruise control is not dangerous, yet some (non-regulated) tell-tales are red in such a case, which is confusing to the operator. The European Commission highly

encourages any effort to bring this, as well as general requirements on symbols and tell-tales, in line with existing Regulations and ISO standards, when they are available (MIL, ABS etc.)

Symbols:

In the absence of suitable symbols in ISO 6727, the standard ISO 2575 should be referred to as well.

JUSTIFICATION: ISO 2575 is widely used in for instance passenger cars and has appropriate symbols. Motorcycle riders often also drive cars and symbols should therefore not differ, as this could lead to confusion.

Supplemental Engine Stop Control:

It is unacceptable to use "given words" only instead of the use of symbols.

JUSTIFICATION: Language should in all cases be substituted by universally understood icons.

Ignition switch:

This item is not an issue for us.

JUSTIFICATION: -

Fuel Tank Shutoff Valve:

We propose to include a note to clarify that the symbol does not have to be visible to the operator during driving and riding.

JUSTIFICATION: To bring in line with "General Requirements".

Automatic:

This item is hard to understand. In any case use of words should be avoided at all times.

JUSTIFICATION: Language should in all cases be substituted by universally understood icons.

Speedometer:

This requirement may be incorporated, but is not necessary. It may not be appropriate to include.

JUSTIFICATION: Regulation No. 39 can be applied and is a separate Regulation.

Horn:

Reword: "...located on the left handlebar..." into "...when located on a handlebar, it shall be on the left-hand side..." etc. etc. for similarly worded phrases.

JUSTIFICATION: Clarification of the text and requirements, where applicable

Headlamp:

See phrasing suggestion above.

JUSTIFICATION: Idem.

Optical Warning Device:

No comment.

JUSTIFICATION: -

Fog lamps:

It is not acceptable to use only one symbol when one control can be used for both functions. Both symbols must be shown. Additionally, it has to be possible to switch the front fog lamp on independently from the rear fog lamp. It is not acceptable to use only one tell-tale for both functions and the colours must be green for front and yellow for rear.

JUSTIFICATION: Bring requirements in line with those of other vehicles (eg. Regulation No. 48), as national laws might not be compatible with a departure of those rules.

Turn signal:

Delete the sentence "Switch is to ... clearly" as it is repetitive. Our suggestion is to state "the control(s) shall be able to being operated without the need for the operator to take his hands off the steering control."

JUSTIFICATION: Clarification of text as well as the important addition that the switch should be positioned in such a way that the rider can activate the switch(es) without major movement of the hand(s).

Hazard Warning Light:

Reword into: "Represented by either the simultaneous flashing of the left and right arrow when these consist of separate tell-tales or represented by given triangle symbol."

JUSTIFICATION: In some cases one single tell-tale for both left and right direction indicators is used and subsequently this one single tell-tale is also used for hazard warning (i.e. no distinction). This should be avoided.

Lighting Control Switch:

Reword into: "The position lamps and/or master lighting control shall be identified by the given symbols, however, if the front and rear position lamps, passing beam (i.e. low beam) as well as registration plate illumination light up automatically when the vehicle is in operation, the symbols for position lamps and master lighting switch are not required to be present."

JUSTIFICATION: The ignition control or switch is often used and this wording should be used for clarity.

"The parking lamps control shall be identified by the given symbol".

JUSTIFICATION: Regardless how the parking lamps are switched on (i.e. separate switch or by means of ignition lock) this should be identified accordingly.

Engine Cooling Temp:

Should be reworded into "Engine Coolant Temperature"

JUSTIFICATION: Clarification of text.

Engine Oil:

"If so equipped" should be added.

JUSTIFICATION: Clarification of text as it could be substituted by only a gauge.

Hand Levers, Footrest, Foot Lever, Rocker Arms, Pedals:

No comment

JUSTIFICATION: -

Foot Selector Manual Control:

Reword into: "Foot Operated Gear Selector"

JUSTIFICATION: Clarification of text.

Hand Selector Manual Contol:

Reword into: "Manually Operated Gear Selector"

JUSTIFICATION: Clarification of text.

Brake:

We agree to include the ABS tell-tale here (Yellow)

Also the following optional symbol for any other braking failure (Red) should be added:

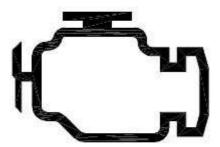


JUSTIFICATION: This is the universal symbol for general braking failure (other than ABS failure) and should therefore be added (i.e. not a required function, but to be used if such tell-tale is present).

B OTHER PROPOSED SYMBOLS

The European Commission has noticed that certain functions are added more and more to motorcycles and other vehicles belonging to the scope as proposed. These symbols should be taken into consideration in the preparatory work on this GTR. Harmonization efforts will lead to a broader acceptance and understanding of symbols and will enable vehicle manufacturers to reduce vehicle design and assembly complexities.

Emissions related Malfunction Indicator Lamp (Yellow)

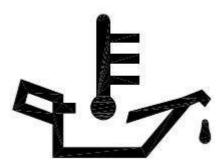


This (or any similar) symbol shall not be used to convey non-emissions related failures or operation states.

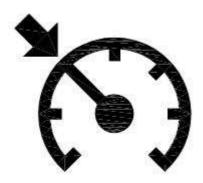
JUSTIFICATION: An emissions related error is not dangerous and therefore the colour of the tell-tale should not be red. Such MILs are already widely used and vary between different manufacturers. The Commission's opinion is that this symbol should be added.

Symbols for further consideration

"If _____ fitted, it shall be identified by the given symbol:"



Oil temperature (Red)



Vehicle speed control (Yellow or Green)



Tyre pressure (Yellow or Red)



Service (reminder) indicator (Yellow)

JUSTIFICATION: For further harmonization purposes.

Final comments

The European Commission would like to stress that in the absence of suitable symbols in the GTR or referred-to ISO standards, the manufacturer may use a symbol of its own conception, however, it shall be avoided that such a symbol can be confused with other symbols in the previously mentioned standards.

JUSTIFICATION: To bring in line with the existing Regulation No. 121 in terms of good practice.

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