

Transmitted by the expert from the India

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India's comments on proposal for the 03 series of amendments to UN Regulation No. 53 and proposal for amendments to the draft new UN Regulation on Light-Signalling Devices (LSD)

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The text reproduced below is prepared by the experts from India to propose changes in the above document. This proposal is to remove the text on the type of beam in accordance with the considerations at the seventy-seventh session of the Working Party on Lighting and Light-Signalling (GRE) regarding a new requirement for automatic switching from the daytime running lamp (DRL) to the headlamp for L3 category vehicles. The modifications to the text of the Regulations are ~~striketrough~~ for deleted characters and in ***bold italic text in blue colour*** for addition of new text

A. PROPOSAL

A1) Paragraph 5.11.1.1 , amend to read:

5.11.1.1. If each DRL whose maximum luminous intensity exceeds 700cd as identified in Annex 1 of [LSD Regulation] is fitted on vehicle, the headlamp ~~{(passing beam)}~~ shall be switched ON and OFF automatically relative to the ambient light conditions (e.g. switch ON during night-time driving conditions, tunnels, etc.) according to the requirements of Annex 7.A2) Paragraph 4.6.1.2.(a), amend to read:

A2) Paragraph 5.11.1.2, amend to read

5.11.1.2. If each DRL whose maximum luminous intensity does not exceed 700cd as identified in Annex 1 of [LSD Regulation] is fitted on vehicle, the switching ON or OFF of headlamp ~~{(passing beam)}~~ may be either manual or automatic. If automatic, conditions of paragraph 5.11.1.1. must be complied with. "

A3) Paragraph 5.11.2, amend to read

"5.11.2. If no daytime running lamp is installed, the headlamp ~~{(passing beam)}~~ shall automatically be ON when the engine is running. "

A4) Annex7 ,amend to read

Annex 7

Ambient light related automatic switching conditions for headlamps ~~{(passing beam)}~~

<i>Automatic switching conditions for headlamps¹ {(passing beam)}²</i>		
Ambient light outside the vehicle²	Headlamps requirement	Response time for switching
less than 1,000 lux	ON	no more than 2 seconds
1,000 lux and more than 1,000 lux	At manufacturer's discretion	at manufacturer's discretion

¹ Compliance with these conditions shall be demonstrated by the applicant, by simulation or other means of verification accepted by the Type Approval Authority.

² The illuminance shall be measured on a horizontal surface, with a cosine corrected sensor on the same height as the mounting position of the sensor on the vehicle. This may be demonstrated by the manufacturer by sufficient documentation or by other means accepted by the Type Approval Authority.

B. JUSTIFICATION

Indian justification has been explained in GRE 79th Session vide document GRE79-20, the following justification have been re-worded and additional justification is explained as below:

- i. Current AHO requirements in UN ECE R 53 have been adopted in 52nd GRE session in April 2004, since then there has been no such technical restriction of head lamp activation either on passing or driving beam. Japan faced the problem of glare from DRL and hence the primary aim was to reduce the glare from DRL & switching to Headlamp automatically was being proposed. Now if glare is a reason for auto passing beam, India has study reservation and would request DRL-L experts to provide specific data to prove the same.
- ii. With driving beam activation the rider gets informed through a mandatory tale tell. So, changeover to passing beam is anytime feasible.
- iii. In UN R48 the activation of headlamp or changeover from main beam to passing beam is predominately manual at the rider's discretion, In case of auto switching of DRL rider still has the freedom to change to main beam,
 - a. The references to automatic switching of headlamp in 4W is optional and can always be overridden by manual operation (refer relevant paragraphs no 6.1.7.1, 6.1.7.2, 6.1.9.3.4, 6.1.9.3.5, 6.2.7.5 ,6.2.7.6.1 & 6.2.7.6.2 of UN R48 Supplement 09 to 06 series of amendment).
 - b. Auto Switching of Headlamp is an optional feature that is dependent upon ambient lighting condition, during normal driving pattern switching ON of main beam or dipped beam is still at the riders' choice.

So India understand that requirement of auto switching is for convenience of rider only

- iv. For 2W changes needed for default passing beam ON after engine running will be complex in nature, this will result in considerable additional technology development time.

So in view of above India understands that activation of passing beam is getting mandated in 2W, whereas for 4W an option exists. India suggests that the text used in the document, i.e. "headlamp" only may be retained.
