

Open issues – R 48 as it affects Adaptive Front Lighting Systems

The key points in the proposed amendments to R48 which still need resolving are as follows:

1. Conditions for activation of V (town) mode (6.20.7.4.2)

Conditions for activation of E (motorway) mode (6.20.7.4.3)

Conditions for activation of W (wet road) mode (6.20.7.4.4)

Conditions for activation of T (bending) mode (6.20.7.4.5)

The conditions for activating the various modes generated plenty of discussion and provisional text is in square brackets for all these areas. Delegates are invited to prepare their positions and be ready to compromise on these issues, if necessary.

2. Traffic change mode (6.20.7.5, 6.20.8.3, 6.20.9.4)

There is some disagreement over the precise form and possibilities of the traffic change mode (s), the switching system and informing the driver of its setting. The discussion here will depend on the outcome of RXXX discussions.

3. Tell-tale (6.20.8) There still remains the question of a tell tale for the AFS system to indicate a failure and also a separate tell-tale for the traffic change mode. How is a failure of the AFS system to be signalled to the driver and what are the provisions required to ensure that it is fail-safe, and continues to provide a minimum of road illumination. The discussion here will depend on the outcome of RXXX discussions.

4. Height of headlamps. (6.20.4.1.2). There were some advocates to reduce the maximum height of the dipped beam headlamps from 1200mm to 950mm. (1500mm is permitted for N3G vehicles).

5. How the Technical Service verifies certain requirements of AFS. (6.20.9.2). There was debate over how to demonstrate compliance with the Regulation. Can this be done by means of manufacturer in-house test reports and in which circumstances can or must the Technical Service perform tests.

6. Headlamp levelling. By a simple majority, governments voted at a previous meeting to mandate automatic headlamp levelling for AFS. However 6.20.6.1.3 seems to be incorrect and should simply copy 6.2.6.2.1. ("In the case where headlamp levelling is necessary to satisfy the requirements of paragraphs 6.20.6.1.1 and 6.20.6.1.2, the device shall be automatic).

7. Headlamp cleaning has not been considered. (6.20.9.1). The text may need revision. Should headlamp wash be required for all AFS systems, only for those with headlamp levelling (i.e. cars whose suspension levels automatically do not require headlamp wash) or only for dipped beam with luminous flux greater than 2000 lumen.

8. The following paragraphs also remain in brackets and might need further discussion:

6.2.4.1.1 (Geometric) Use the word centroid instead of centre of gravity.

6.20.5 Geometric visibility.

6.20.7.4 Text in brackets.

6.20.7.2 (neutral state?)