GRE TF Substitutes / Retrofits

Document: TFSR-07-07

Date: 2019-08-13

GRE Task Force on Substitutes / Retrofits (TF S/R)

7th meeting
18 July 2019, 14:30– 17:00 CEST

Novotel Karlsruhe City
Festplatz 2
D- 76137 Karlsruhe
Germany

DRAFT REPORT

		Documents
1	Welcome and opening remarks	
	The chairman opened the meeting and welcomed the participants.	
2	Organisational issues	
	Some organisational issues were announced. The list of participants is shown in Annex 1.	
2.1	Introduction of participants	
	Apologies had been received from: Phil Bailey, UK Ad de Visser, IEC Cor Versluijs, IEC Tamas Torma, GTB	
3	Adoption of the agenda	TFSR-07-01
	The chairman announced that he had prepared a presentation for agenda item 7. Also Mr. Plathner and Mr. Schlager announced that they had prepared additional input for agenda item 7. The agenda was approved with those two additions.	
4	Approval of the report of the previous meeting	TFSR-06-06rev1
	The revised report was approved.	
5	LED Substitutes for signalling application	
5.0	Review of the discussions / decisions at GRE81	GRE-81-14 Report GRE-81 section 13 and 14
	The report of GRE-81 and the guidance given to the task force was noted.	
5.1	R128 Body text	WP29/2019/19
	No discussion, document noted	

5.2	R.E.5 PY21W/LED	GRE/2018/40 WP29/2019/29 GRE-81-06 [WP29/2019/xx]
	No discussion, document noted	
5.2.1	Additional category proposals R5W/LED, C5W/LEDK, W5W/LEDK	GRE/2019/09 GRE/2019/10 [WP29/2019/xx]
	No discussion, document noted	
5.3	Mechanical keying, Interlock IEC 60061	GRE-80-03 GRE-81-07
	No discussion, the progress in IEC was noted.	
5.4	Equivalence Criteria	GRE-80-02
	It was noted that this document was being updated under agenda item 6.	
5.5	Changes to Device Regulations	GRE/2018/42 [WP29/2019/xx]
	No discussion, document noted	
5.6	Changes to Installation Regulations	GRE/2018/41 [WP29/2019/xx]
	No discussion, document noted	
6	LED Substitutes for road illumination application	
6.0	Review of the discussion at GRE81	GRE-81-14 Report GRE-81 section 15
	The report of GRE-81 and the guidance given to the task force was noted.	
6.1	Demonstration of halogen headlamps equipped with LED prototypes	TFSR-05-10
	No discussion, document noted	
6.2	R.E.5 H11/LED	(TFSR-05-06, H7/LED) TFSR-06-02 TFSR-07-02 GRE/2019/21
	Mr. Schlager introduced document TFSR-07-02, which is an update of the document TFSR-06-02 based on the comments received during the 6th meeting of the taskforce in Paris.	
	Some editorial changes to Table 3 Part 1 and Table 3 Part 3 were agreed: - In Table 3.1, replace “0” by “n/a”. - Table 3.3 to replace the “-“ by “n/a” Note by the secretary: These changes were implemented in TFSR-07-02rev1	TFSR-07-02rev1
	Mr Pernkopf asked about the maximum test temperature and the nomenclature for this category.	
	Mr Rovers commented about Table 3.3 and a possible maximum requirement at C180.	

	Mr. Goldbach asked for clarification on the term "standard" light sources in Table 1.	
	The questions raised were discussed among the experts and clarified. Mr. Schlager explained that the intensity in the C180 plane was showing big variations in the halogen lamp due to the shadowing effect of the lead-in wire.	
	After clarification of all the points, it was agreed to submit the document with the editorial improvements to GRE82 as a formal document. Note by the secretary: after the meeting, the submitted document TFSR-07-02rev1 was distributed by the GRE secretary with document number GRE/2019/21	
	Later in the meeting, Mr. Grigorescu asked again about the test temperature of 60°C, and there followed a further long discussion about the UN specifications for high temperature testing. It was noted that for the devices no such high temperature testing was required by the UN regulations, and that the proposed H11/LED included a luminous flux requirement at 60°C, in a similar way as is required for the L1/6 category.	
6.3	Mechanical keying, Interlock IEC 60061 H11/LED	(TFSR-05-05 H7/LED) TFSR-06-03
	Mr. Plathner reported that the input and questions raised during the 6th meeting of the task force had been presented to the IEC SC34B/WG2 experts in their recent meeting held in Delft, and the IEC experts had recommended to define the polarity of the connector in the UN category sheet. Mr. Schlager confirmed that the polarity of the connector was included in document TFSR-07-02	
6.4	Equivalence Criteria	TFSR-05-04 TFSR-06-04 TFSR-06-07 (rev of TFSR-05-04) TFSR-07-04 [GRE-82-03]
	Mr. Schlager introduced document TFSR-07-04, and the changes compared to the previous version were discussed in detail.	
	Mr. Koss suggested to include in Figure 2 in Annex 1B the word "detector" next to the rectangle, and this was confirmed by the group.	
	With this change, it was agreed to submit the document to GRE82 as an informal document, without track-change colours.	
	Note by the secretary: after the meeting, the submitted document TFSR-07-04 was assigned document number GRE-82-03 by the GRE secretary	
6.5	Changes to Device Regulations – R-RID	TFSR-05-03 TFSR-07-03 TFSR-07-03rev1

		GRE/2019/19
	The document TFSR-07-03 was reviewed on the screen and it was agreed to submit the revised version to GRE82 as a formal document, without track changes.	
	Note by the secretary: after the meeting, the submitted document TFSR-07-03rev1 was distributed by the GRE secretary with document number GRE/2019/19	
7	Filament-style LED replacement light sources	
	The chairman reminded about the history of the discussion, where retrofits in R128 had been discussed. He reminded that in the 6th meeting in Paris is had been concluded to dis-continue the work on LED retrofits in R128. Instead work would be focussed on "LED replacement light sources" for inclusion in R37, making the scope of R37 more technologically neutral. Mr. Manz explained that a filament is, in essence, a "small thin object" and in the context of a revised R37, filament light sources can include light generation in a filament by - Either thermal radiation (incandescence) - Or LED technology	
	Mr. Kooß commented that this approach was still not yet completely technology neutral, since two specific technologies were given. He asked why there should be a differentiation between the two. Mr. Manz replied that even if the scope is opened for other technologies, the testing should be done technology specific. There followed a discussion on the word "filament", and if a filament always included thermal radiation. It was agreed to include in R37 a definition of "filament", to avoid confusion, and to clarify that the light emitted from the filament could be generated by different technologies. However, if hybrid solutions should also be allowed was not finally concluded. A presentation with a summary of the ideas for "technology neutral R37" was shown by Mr. Manz, and edited on the screen. This edited document was distributed after the meeting with document number TFSR-07-05. After this presentation, Mr. Schlager and Mr. Plathner introduced a presentation, based on the same idea as discussed in the 6th meeting in Paris, and as shown by Mr. Manz, but going more into some details. This document was distributed after the meeting with document number TFSR-07-06. Based on these slides, there was a longer discussion on the relationship of "substitutes" and "retrofits". It was agreed that "filament light sources in LED technology" in R37 might need to have additional requirements compared to "substitutes" in R128, e.g.	

	electrical, thermal, to ensure compatibility in the application. The photometric equivalence criteria for "Filament in LED technology" could be taken from the agreed criteria for "substitutes". It was concluded that the general approach to open R37 for other technologies would achieve "legal equivalence", and it was agreed that a detailed technical discussion was necessary as a next step. The chairman offered to report the ongoing discussion to GRE82, to get confirmation from GRE on the next steps.	
7.0	Review the discussion at GRE-80 and GRE-81	
	GRE-80	GRE-80-33 GRE-80-34 GRE-80 report, section 21
	No discussion, document noted	
	GRE-81	GRE-81-14 Report GRE-81, section 15
	The report of GRE-81 and the guidance given to the task force was noted.	
7.1	R37 approach – legal and technical equivalence	TFSR-06-05rev1 TFSR-07-05 TFSR-07-06
	Discussed under agenda item 7.	
7.2	Changes to R37	TFSR-07-05 TFSR-07-06
	Discussed under agenda item 7.	
7.3	Changes to R128 (if any)	
	No discussion	
7.4	Changes to RE5, first category	
	No discussion	
8	Next meeting(s)	
	It was agreed to await further guidance from GRE82 and then schedule a next meeting.	
9	Closure	
	The chairman thanked the participants and closed the meeting.	

P. Plathner

Annex 1: List of participants

Attendance Sheet

6th meeting of GRE Task Force Substitutes / Retrofits

Karlsruhe, Germany, 18 July 2019

Name	CP / NGO	Signature
Mr. Manz	DE	
Mr. Krautscheid	DE	
Mr. Plathner	IEC	
Mr. Schlager	IEC	
Mr. Rovers	NL	
Mr. De Visser	IEC	apologized
Mr. Versluijs	IEC	apologized
Mr. Terburg	GTB	
Mr. Böttcher	ADAC / FIA	
Mr. Zimmermann	ADAC / FIA	–
Mr. Vandervreken	CLEPA	–
Mr. Bartelsen	DE	–
Mr. Bailey	UK	apologized
Mr. Goldbach	OICA	
Mr. Blusseau	CLEPA	
Mr. Prigent	OICA	–
Mr. Pamart	FR	–
W. van Laarhoven	NL	
Mr. Torma	GTB	apologized
Mr. Tiesler-Wittig	GTB	
Mr. FERNKOPF Michael	GTB	
Mr. KŘIŽÁK	ČNK CIE	
Mr. SCHWENKSCHUSTER	GTB	
Mr. Takahiro Koyama	JP	
Mr. Toshimichi ANZAI	Japan	
Mr. JONATHAN Ebbney	NGO	
Mr GRIGORESCU	GTB	
BLUSSEAU	GTB 1/2	
Mr. KOOB	GTB	

Name	CP / NGO	Signature
HAY Frédéric	Clépa.	
Niklas Blomquist	GTB	
Gert Coeyhammes	CLEPA	
Thomas Baudbrayt	CLEPA	