

Informal document No. **2**
(51st GRE, 15-19 September 2003,
agenda item 1.1.2.10.)

~~TRANS/WP.29/GRE/2003/22/Rev.1~~
~~June 2003~~

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Lighting and Light-Signalling (GRE)
(~~Fifty first session, 15 September – 19 September 2003,~~
~~agenda item 1.1.2.10.~~)

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 48
02 SERIES OF AMENDMENTS
(Installation of lighting and light-signalling devices)

Transmitted by the Experts from the Czech Republic and Germany

Note: The text reproduced below was prepared by the experts from the Czech Republic and Germany, in order to improve road safety by the prescription of electrical connections between the towing vehicle and the trailer. It is a revision of the proposal in the Informal Document 25 of the 50th GRE. The amended text is marked in **bold** characters.

Note: This document is distributed to the Experts on Lighting and Light-Signalling only.

A. PROPOSAL

Insert a new paragraph 5.24., to read:

"5.24. Electrical connections between the towing and the towed vehicles

The electrical connections of lighting and light-signalling equipment of the *trailer* to the towing vehicle shall be provided by a 7-pole black (dark) coloured socket (on towing vehicle) and plug (*on trailer*) according to ISO 1724 Standard, type 12 N for the 12 V system, or to ISO 1185 Standard, type 24 N for the 24 V system; the socket and plug for other purposes (supplementary) shall be white (light) coloured and shall meet the requirements of ISO 3732 Standard, type 12 S for the 12 V system or to ISO 3731 Standard, type 24 S for the 24 V system.

5.24.1. On *towing vehicles and trailers with 12 V system* the installation of a 13-pole connector ISO 11 446 instead *of or in addition* to a 7-pole socket and plug is permissible.

5.24.2. On *towing vehicles and trailers with 24 V system* the installation of a 15-pole connector *ISO 12 098* instead *of or in addition* to a 7-pole socket and plug is permissible.

5.24.3. If a vehicle is equipped with a 15-pole socket and the trailer with two 7-pole plugs an adaptor according to ISO 12 098, Annex A – Example 1 shall be used.

5.24.4. If a vehicle is equipped with two 7-pole sockets and the trailer with a 15-pole plug an adaptor according to ISO 12 098, Annex A – Example 2 shall be used.

5.24.5. *[A cargo-carrier mounted on a trailer hitch is compared with a trailer.] "*

B. JUSTIFICATION

Regulations Nos. 13 and 48 do not determine the means of electrical connection between the towing and the towed vehicle for supplying and control of the lighting and light – signalling devices of the trailer. *The prescription of the electrical connections between the towing vehicle and the trailer could improve road safety and could avoid misuse. The proposal was amended according to the actual state of the ISO standards (see below).*

The deletion of the vehicle categories is the consequence of an unknown equipment with 12 V or 24 V systems in some categories of vehicles. In the category O₂ for e.g., it is possible to have 12 V or 24 V system, dependent on the towing vehicle and the construction of the trailer.

The state of standards is the following:

12 V system:	7 – pole connector, type 12N (normal)	ISO 1724, Third edition, 1997
	7 – pole connector, type 12S (supplementary)	ISO 3732, Third edition, 1997
24 V system:	7 – pole connector, type 24N (normal)	ISO 1185, Second edition, 1997
	7 – pole connector, type 24S (supplementary)	ISO 3731, Third edition, 1997
12 V system:	13 – pole connector	ISO 11 446, Second edition, <i>Amend. 1, 1997</i>
24 V system:	15 – pole connector	ISO 12 098, First edition, <i>Corr.1, 2001</i>