



**Economic and Social
Council**

Distr.
RESTRICTED

TRANS/WP.29/GRSG/2003/8
21 February 2003

Original: ENGLISH
ENGLISH AND FRENCH ONLY

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

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

Working Party on General Safety Provisions (GRSG)
(Eighty-fourth session, 5-9 May 2003,
agenda item 7.)

**PROPOSAL FOR DRAFT AMENDMENT TO REGULATION No. 97
(Vehicle alarm systems)**

Transmitted by the Expert from Germany

Note: The text reproduced below was prepared by the expert from Germany in order to incorporate into the Regulation prescriptions for degradation systems during unauthorized use. It is based on a document distributed without a symbol (informal document No. 13) during the eighty-third session (TRANS/WP.29/GRSG/62, para. 23).

Note: This document is distributed to the Experts on General Safety Provisions only.

Insert a new Part IV, and paragraphs 41. to 47., to read:

“PART IV - SCOPE, DEFINITIONS AND REQUIREMENTS FOR VEHICLE
DEGRADATION 1/ SYSTEMS DURING UNAUTHORIZED USE”

41. Scope

41.1. Vehicle degradation systems intended to be fitted optionally in vehicles of classes M₁ and N₁ and which only become effective after standstill.

41.2. Where such systems are fitted to vehicles of other classes, they are required to comply analogously with the provisions of this part IV.

42. Definitions

For the purposes of Part IV of this Regulation:

42.1. "Vehicle degradation system" (VDS) means a device which after previous activation is intended to prevent or to restrict a vehicle being driven away powered by its own engine after standstill of the vehicle;

42.2. "Activation" is a measure which sets the VDS to a state in which the vehicle can only be driven away powered by its own engine after previous standstill up to a defined restricted degree or in which movement is impeded;

42.3. "Activation device" means a device for activating the VDS;

42.4. "Warning signal" means a signal capable of indicating the activation state and the resulting imminent degradation of the vehicle to the vehicle user;

42.5. "Degradation" means a series of measures after which the vehicle can only be driven away up to a defined restricted degree powered by its own engine;

42.6. "Standstill" means the state where the device for operating the engine is in the "off" position. Standstill can also exist where the device for operating the engine is not in the "off" position, but where the vehicle speed is 0 kph over a continuous period of not less than 15 seconds;

1/ The term "degradation" was defined by CEN; TC 278, WG 14: "After Theft Systems for Vehicle Recovery"

- 42.7. "Deactivation" means a measure which resets the VDS into its deactivated state;
- 42.8. "Type of vehicle degradation system" means devices which do not differ in such essential aspects as:
- (a) the VDS manufacturer's trade name or mark
 - (b) the operation of the VDS
 - (c) the kind of activation device.

43. General specifications

- 43.1. The activation of the VDS and the degradation of the vehicle may only follow these specifications.
- 43.2. If the VDS includes the possibility of a radio transmission, e.g. for setting or unsetting of the alarm or for alarm transmission, it shall comply with the relevant ETSI Standards 2/, e.g. EN 300 220-1 V1.3.1. (2000-09) and EN 300 220-2 V1.3.1. (2000-09), EN 300 220-3 V1.1.1. (2000-09) and EN 301 489-3 V1.2.1. (2000-08) (including any advisory requirements). The frequency and maximum radiated power of radio transmissions for the setting and unsetting of the alarm must comply with the CEPT/ERC 3/ Recommendation 70-03 (1977) relating to the use of short range devices 4/.

Evidence of compliance can be provided by means of the manufacturer's own documents.

- 43.3. Vehicle degradation systems shall be so designed, manufactured and fitted that any equipped vehicle continues to meet the applicable technical requirements with regard to electromagnetic compatibility (EMC) in accordance with the latest amendment of Regulation No. 10.
- 43.4. The VDS shall not degrade the vehicle performance unless the state in accordance with paragraph 2.6. occurs. It shall not inadvertently become active or lead to vehicle degradation. This applies, in particular, to states not corresponding to paragraph 2.6.
- 43.5. The installation of a VDS in a vehicle shall have no influence either on the performance or on the safe operation of the vehicle.
- 43.6. Failure of the VDS, or failure of its electrical supply shall not affect the safe operation of the vehicle.
- 43.7. A VDS may be combined with other vehicle systems or may be integrated into them.

2/ ETSI: European Telecommunication Standards Institute. If these standards are not available when this Regulation comes into force, then the relevant domestic requirements shall apply.

3/ CEPT: Conference of European Posts and Communications.
ERC: European Radiocommunications Committee

4/ Contracting Parties may prohibit the frequency and/or the power and may permit the use of other frequency and/or power.

43.8. In case of an aftermarket installation of a VDS, evidence must be provided to demonstrate that the vehicle with its modified components, if any, continues to comply with all applicable requirements.

44. Particular specifications

44.1. Extent of the degradation

44.1.1. The VDS shall be designed so that it prevents or degrades the operation of the vehicle under its own power after previous standstill by means of influencing vehicle components required for the operation of the vehicle under its own power.

44.1.2. The installation of a VDS into a vehicle equipped with emission-reducing components in the exhaust line shall not result in uncombusted fuel impairing the performance of these components.

44.2. Operating reliability

The vehicle degradation device shall be so designed and built such that when installed as specified by the manufacturer it is able to withstand the environment within the vehicle for a reasonable lifetime (for testing see paragraph 44.). More particularly the electrical properties of the in-board circuitry shall not be adversely affected by the addition of the immobilizer.

44.3. Operating safety

Steps shall be taken to ensure that the VDS does not change its state (activated / deactivated) as a result of the tests in accordance with paragraph 5. of this Part.

44.4. Activation of the VDS

The VDS can be activated from the outside (e.g. by a radio signal, induction loops) or by means of devices fitted in the vehicle when an unauthorized use is detected (e.g. theft detection, budgeting method).

The VDS can also be activated by means of a combination of these measures.

44.5. Degradation of the vehicle

44.5.1. To notify the vehicle user of activation of the VDS, suitable indication of a (visual, acoustic) warning signal in the vehicle interior is allowed.

44.5.2. When the VDS is in its activated state in accordance with paragraph 43.4. of this Part, and the standstill of the vehicle occurs for the first time, the vehicle shall be degraded by means of the measures indicated in paragraph 43.1.1. of this Part. The degraded vehicle may thence be operated at a maximum speed of between [15] and [20] km/h. In this degraded state, a visual warning signal consisting of simultaneous flashing of all turn signal lamps shall be provided until deactivation.

44.5.3. Provided the VDS is activated, the engine cannot be started any more under the following conditions:

- (a) When the vehicle stands still and the ignition is switched off and the vehicle's doors locked
- (b) When the vehicle stands still and the ignition is switched off for more than [10] minutes.

44.6. Deactivation

Deactivation by the unauthorized vehicle user shall not be possible.

45. Operation parameters and test conditions

45.1. Operation parameters

All components of the VDS shall comply with the relevant prescriptions given in Part III, paragraph 33.

These tests do not apply to:

- (a) those components that are fitted and tested as part of the vehicle, whether or not a VDS is fitted (e. g. lamps); or,
- (b) those components that have previously been tested as part of the vehicle and for which documentary evidence has been provided.

45.2. Test conditions

All the tests shall be carried out in sequence on a single VDS. However, at the discretion of the test authority other samples may be used if this is not considered to affect the results of the other tests.

Upon completion of all the tests specified below, the VDS shall be tested under the test conditions specified in Part I, paragraph 7.2.1.2. to check that it continues to function normally. Where necessary, fuses may be replaced during the test.

All components of the VDS shall comply with prescriptions given in paragraphs 7.2.2. to 7.2.8. and 7.2.12. of Part I.

46. Instructions

Each VDS shall be accompanied by instructions in accordance with the relevant prescriptions contained in Part III, paragraph 34.

47. Use of the VDS

The Contracting Parties shall establish provisions to ensure that VDSs can only be used for the purpose of theft prevention.
