Economic Commission for Europe
Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

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Geneva, 9–12 November 2010
Item 4.3.5 of the provisional agenda
1958 Agreement – Consideration of draft amendments
to existing Regulations proposed by GRSG

Proposal for Supplement 3 to Regulation No. 116 (Protection
of motor vehicles against unauthorized use)

Submitted by the Working Party on General Safety Provisions *

The text reproduced below was adopted by the Working Party on General Safety (GRSG) at its ninety-eighth session in order to simplify the test procedures. It is based on ECE/TRANS/WP.29/GRSG/2010/8, as amended by the report (ECE/TRANS/WP.29/GRSG/77, para. 22). It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2006–2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
Insert new paragraphs 2. and 2.2., amend to read:

“2.1. "component" means a device subject to the requirements of this regulation and intended to be part of a vehicle, which may be type-approved independently of a vehicle where this regulation makes express provisions for so doing;

2.2. “separate technical unit” means a device subject to the requirements of this regulation and intended to be part of a vehicle, which may be type-approved separately, but only in relation to one or more specified types of vehicle where this regulation makes express provisions for so doing;”

Paragraph 2.1. (former), renumber as paragraph 2.3.

Paragraph 3.2., amend to read:

“3.2. It shall be accompanied by an information document established in accordance with the model shown in Annex 1, Part 1, 2 or 3 as appropriate, and giving a description of the technical characteristics of the device to prevent unauthorized use and/or the VAS and/or the immobilizer and the method(s) of installation for each make and type of vehicle on which the protective device and/or VAS and/or immobilizer is intended to be installed”

Paragraph 4.10., amend to read:

“4.10. …

Where a VAS and/or immobilizer manufacturer supplies an unmarked VAS and/or immobilizer approved to this Regulation to a vehicle manufacturer, for fitment by that manufacturer as original equipment for a vehicle model or range of vehicle models, the VAS and/or immobilizer manufacturer shall supply a number of copies of the certificate of conformity to the vehicle manufacturer, sufficient for that manufacturer to obtain the vehicle approval to Part III and/or Part IV, as appropriate, of this Regulation.

…”

Paragraph 6.1., amend to read:

“6.1. Definitions

For the purpose of Part II of this Regulation,”

Paragraph 6.4.2.1., amend to read:

“6.4.2.1. Operation tests

For the operation tests required according to paragraphs 6.4.2.3., 6.4.2.4., 6.4.2.5., 6.4.2.6. and 6.4.2.8.4., if some of the tests required in each of these paragraphs prior to the operation tests are performed in series on a single VAS, the operation test may be carried out one time only after the chosen tests are completed instead of performing the operation tests required in the paragraphs after each of the chosen tests. Vehicle manufacturers and suppliers have to guarantee satisfactory results only on non accumulated procedures”

Paragraph 6.4.2.3., amend to read:

“6.4.2.3. … shall be repeated.

With the agreement of the Technical Service this requirement need not apply in the following circumstances:
(a) **Type Approval of a VAS which is to be type approved as a separate technical unit**

In this case, the manufacturer of the VAS shall:

(i) Specify in paragraph 4.5. of the information document (Annex 1, Part 2), that the requirement of this paragraph was not applied to the VAS (in accordance with paragraph 7. of this regulation), and

(ii) Specify in paragraph 4.1. of the information document, the list of vehicles to which the VAS is intended to be fitted and the relevant installation conditions in paragraph 4.2.

(b) **Type approval of a vehicle in respect of an AS**

In this case, the manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the AS due to the nature of installation conditions and the vehicle manufacturer shall prove it by submitting related documents.

(c) **Type approval of a vehicle in respect of the installation of a VAS which is type approved as a separate technical unit**

In this case, the vehicle manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the installation of the VAS where the relevant installation conditions are met.

This requirement does not apply in cases where the information required in paragraph 3.1.3.1.1. of Annex 1, Part 1 has already been submitted for the approval of the separate technical unit.”

*Paragraph 6.4.2.7.*, amend to read:

“6.4.2.7. ... alarm system including status display.

With the agreement of the Technical Service this requirement need not apply in the following circumstances:

(a) **Type Approval of a VAS which is to be type approved as a separate technical unit**

In this case, the manufacturer of the VAS shall:

(i) Specify in paragraph 4.5. of the information document (Annex 1, Part 2), that the requirement of this paragraph was not applied to the VAS (in accordance with paragraph 7. of this Regulation),

(ii) Specify in paragraph 4.1. of the information document, the list of vehicles to which the VAS is intended to be fitted and the relevant installation conditions in paragraph 4.2.; and

(iii) Prove the energy consumption requirements are not exceeded by submitting related documents.
(b) Type approval of a vehicle in respect of an AS

In this case, the manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the AS due to the nature of installation conditions and the vehicle manufacturer shall prove it by submitting related documents.

(c) Type approval of a vehicle in respect of the installation of a VAS which is type approved as a separate technical unit

In this case, the vehicle manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the installation of the VAS where the relevant installation conditions are met.

This requirement does not apply in cases where the information required in paragraph 3.1.3.1.1. of Annex 1, Part 1 has already been submitted for the approval of a separate technical unit.”

**Paragraph 6.4.2.12.** amend to read:

“6.4.2.12. …submitted to the tests described in Annex 9.

In this case, a VAS which meets all the functional status of the tests in Annex 9 is deemed not to cause the alarm signal to sound unnecessarily in association with the requirements in paragraph 6.3.1.2.1.

With regard to the conformity to the functional status in each test, a VAS, which is designed to sound the alarm in the set state in some of the test conditions given in Annex 9 and sound the alarm signal in the tests, is deemed to function as designed in the tests and thus deemed to meet the functional status of the tests. In this case, the manufacturer of the VAS shall prove it by submitting related documents.”

**Part III**

**Paragraph 7.,** amend to read:

“7. **Part III: approval of a vehicle with regard to its alarm system**

When a VAS approved to Part II of this Regulation is installed in a vehicle submitted for approval to Part III of this Regulation, tests required to be passed by a VAS in order to obtain approval to Part II of this Regulation shall not be repeated.”

**Paragraph 7.3.2.1.,** amend to read:

“7.3.2.1. General

…

If a separate audible warning device according to paragraph 7.3.2.3.1. below is used, the original equipment standard audible warning device may additionally be actuated by the AS, provided that any tampering with the standard audible warning device (generally more accessible) does not affect the operation of the additional audible warning device.”
Paragraph 7.3.8, amend to read:

“7.3.8. Entry delay

If the device for unsetting the AS is fitted within the protected area, a delay of 5 seconds minimum and 15 seconds maximum shall be allowed before the activation of the audible and optical signals. The delay period may be adjustable to suit individual operators’ circumstances.”

Paragraph 8.2.2., amend to read:

“8.2.2. If the …requirements). The frequency and maximum radiated power of radio transmissions for the setting and unsetting of the immobilizer must comply with the CEPT/ERC (see footnote 6/ pertinent to paragraph 6.2.3.) Recommendation 70-03 (17 February 2000) relating to the use of short range devices (see footnote 7/ pertinent to paragraph 6.2.3.).”

Paragraph 8.2.4.(a), amend to read:

“(a) the vehicle is equipped or intended to be equipped for ambulance, fire brigade or police purposes; or”

Annex 1, Part 1, insert a new paragraph 3.1.3.1.1., to read:

“3.1.3.1.1. A detailed description of the vehicle type with regard to the arrangement of the installed VAS illustrated by photographs and/or drawings (where the VAS is already type approved as a separate technical unit, reference may be made to the description in paragraph 4.2. of the VAS manufacturer's information document):”

Annex 1 - Part 2

The heading, amend to read:

“Information document

in accordance with paragraph 6. of Regulation No. 116 relating to ECE component or separate technical unit type approval of an alarm system”

Paragraph 1.3., footnote (b), amend to read:

“(b) If the means of identification of type contains characters not relevant to describe the component or separate technical unit types covered in this information document, such characters shall be represented in the documentation by the symbol “?” (e.g. ABC??123??)”

Insert a new paragraph 4.5., to read:

“4.5. List of paragraphs of this Regulation which do not apply by virtue of the installation conditions for a VAS type approved as a separate technical unit, which is to be installed in specified places in specified vehicles:”
Annex 1 - Part 3

The heading, amend to read:

“Information document in accordance with paragraph 8. of Regulation No. 116 relating to ECE component or separate technical unit type approval of an immobilizer system”

Paragraph 1.3., footnote (b), amend to read:

“(b) If the means of identification of type contains characters not relevant to describe the component or separate technical unit types covered in this information document, such characters shall be represented in the documentation by the symbol ‘?’ (e.g. ABC??123??)”

Annex 2 - Part 2

The heading, amend to read:

“…of a type of component or separate technical unit as an alarm system pursuant to Regulation No. 116 Approval …”

Paragraph 1.3., footnote (b), amend to read:

“(b) If the means of identification of type contains characters not relevant to describe the component or separate technical unit types covered in this information document, such characters shall be represented in the documentation by the symbol ‘?’ (e.g. ABC??123??)”

Annex 2 - Part 3

The heading, amend to read:

“…of a type of component or separate technical unit as an immobilizer system pursuant to Regulation No. 116 Approval ...

...”

Paragraph 1.3., footnote (b), amend to read:

“(b) If the means of identification of type contains characters not relevant to describe the component or separate technical unit types covered in this information document, such characters shall be represented in the documentation by the symbol ‘?’ (e.g. ABC??123??)”

Annex 9, paragraph 1., amend to read:

“1. Method ISO

Immunity against disturbances conducted along supply lines

Apply test pulses 1, 2a/2b, 3a, 3b, 4 and 5a/5b according to the International Standard ISO 7637-2:2004 to the supply lines as well as to other connections of VAS/AS which may be operationally connected to supply lines.

Concerning pulse 5, pulse 5b shall be applied on vehicles which include an alternator with internal limitation diode and pulse 5a shall be applied for others cases.
Concerning the pulse 2, pulse 2a shall always be applied and pulse 2b could be performed with the agreement between the vehicle manufacturer and the technical approval services.

With the agreement of the Technical Service, Test pulse 5a/5b need not be applied in the following circumstances:

(a) Type Approval of a VAS which is to be type approved as a separate technical unit and intended for the fitment to (a) vehicle(s) without any alternators

In this case, the manufacturer of the VAS shall:

(i) specify in paragraph 4.5. of the information document (Annex 1, Part 2), that the requirement of this paragraph was not applied to the VAS (in accordance with paragraph 7. of this Regulation),

(ii) and specify in paragraph 4.1. of the information document, the list of vehicles to which the VAS is intended to be fitted and the relevant installation conditions in paragraph 4.2.

(b) Type approval of a vehicle in respect of an AS intended for fitment to (a) vehicle(s) without alternators

In this case, the manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the AS due to the nature of installation conditions.

(c) Type approval of a vehicle in respect of the installation of a VAS which is type approved as a separate technical unit and intended for the fitment to vehicle(s) without any alternators

In this case, the vehicle manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the installation of the VAS where the relevant installation conditions are met.

This requirement does not apply in cases where the information required in paragraph 3.1.3.1.1. of Annex 1, Part 1 has already been submitted for the approval of the separate technical unit.

VAS/AS in unset state and set state

The test pulses 1 through 5 shall be applied. The required functional status for all applied test pulses are given in table 1.
Immunity against disturbance coupled on signal lines

...  

Electrical disturbance from electrostatic discharges


With the agreement of the Technical Service this requirement need not apply in the following circumstances:

(a) Type Approval of a VAS which is to be type approved as a separate technical unit

In this case, the manufacturer of the VAS shall:

(i) specify in paragraph 4.5. of the information document (Annex 1, Part 2), that the requirement of this paragraph was not applied to the VAS (in accordance with paragraph 7. of this Regulation),

(ii) and specify in paragraph 4.1. of the information document, the list of vehicles to which the VAS is intended to be fitted and the relevant installation conditions in paragraph 4.2.

(b) Type approval of a vehicle in respect of an AS

In this case, the manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the AS due to the nature of installation conditions and the vehicle manufacturer shall prove it by submitting related documents.

(c) Type approval of a vehicle in respect of the installation of a VAS which is type approved as a separate technical unit

In this case, the vehicle manufacturer shall specify in paragraph 3.1.3.1.1. of the information document (Annex 1, Part 1), that the requirement of this paragraph does not apply to the installation of the VAS where the relevant installation conditions are met.

Table 1
Severity/functional status (for supply lines)

<table>
<thead>
<tr>
<th>Test pulse number</th>
<th>Test level</th>
<th>Functional status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>III</td>
<td>C</td>
</tr>
<tr>
<td>2a</td>
<td>III</td>
<td>B</td>
</tr>
<tr>
<td>2b</td>
<td>III</td>
<td>C</td>
</tr>
<tr>
<td>3a</td>
<td>III</td>
<td>A</td>
</tr>
<tr>
<td>3b</td>
<td>III</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>III</td>
<td>B</td>
</tr>
<tr>
<td>5a/5b</td>
<td>III</td>
<td>A</td>
</tr>
</tbody>
</table>
This requirement does not apply in cases where the information required in paragraph 3.1.3.1.1. of Annex 1, Part 1 has already been submitted for the approval of the separate technical unit.”

Radiated emissions…”