Comments on GRSG-102-20 (Proposal for amendments to Regulation No. 67 by the expert from Germany)

The modifications to the text of informal document GRSG-102-20 are marked in blue characters.

I. Proposal

Insert a new paragraph 2.20 to read:

"2.20 "Hose assembly" means an assembly of a flexible hose and couplings;"

Paragraph 5.3, amend to read:

"5.3. Notice of approval or of refusal or of extension of approval of an LPG equipment type/part pursuant to this Regulation shall be communicated to the Parties to the Agreement applying this Regulation, by means of a form conforming to the model in Annex 2B to this Regulation. If it concerns a container, Annex 2B - Appendix 1 shall be added **and if it concerns an hose assembly, Annex 2B - Appendix 2 shall be added.**

Annex 2B

Paragraph 1, insert a new line at the end of the list:

"Hose assembly including the list of the possible hoses, as laid down in the Appendix 2 to this Annex"

Insert a new appendix 2 to read:

Annex 2B - Appendix 2 (hose assembly only)

List of the possible hoses included in the hose assembly approval or extension

Hoses	Туре	Manufacturer's name	Approval No.	Extension No
01				
02				
03				

Modify paragraph 9.6 to read:

"9.6 **Per manufacturing batch, a randomly taken representative number of hose assemblies** Every hose assembly which is applied in the high pressure class (Class 1) according to the classification as prescribed in paragraph 2. of this Regulation, shall, during half a minute, be subjected to a test with gas under a pressure of 3 000 kPa **by the approval holder**."

Annex 8

Insert a new paragraph 1.7.1 to read:

- "1.7.1 If hose and couplings are not assembled by the approval holder the approval of the hose assembly shall consist of
 - hose(s) 1/,
 - couplings and
 - assembly instruction.

Hose(s) may be previously type approved in accordance with paragraphs 1.1 to 1.5. The type approval holder of the hose may be also the hose manufacturer.

The assembly instruction shall be written in the language of the country to which the type will be delivered, or at least in English. It shall include detailed characteristics of equipment used for the assembling operation.

Insert a new footnote 1/ to read:

"The possible hoses included in the hose assembly approval will be indicated in Appendix 2 to Annex 2B."

renumber Paragraphs 1.7.1. (former) 1.7.2., 1.7.2.1., 1.7.2.2., 1.7.2.3., 1.7.3., 1.7.3.1.

as paragraphs 1.7.2, 1.7.3, 1.7.3.1, 1.7.3.2, 1.7.3.3, 1.7.4, 1.7.4.1

New paragraph 1.7.4.1., amend to read:

"1.7.3.4.1. The hose assembly (hose with couplings) has to withstand during five minutes a gas pressure of 3,000 kPa without any leakage."

Insert a new paragraph 1.7.4.2 to read:

"1.7.4.2 If the hose assembly is assembled by a company other than the manufacturer it has to withstand during five minutes a gas pressure of 3,000 kPa without any leakage."

Insert a new paragraph 2.7.1 to read.

- "2.7.1 If hose and couplings are not assembled by the approval holder the approval of the hose assembly shall consist of
 - hose(s) 1/,
 - couplings and
 - assembly instruction.

Hose(s) may be previously type approved in accordance with paragraphs 1.1 to 1.5. The type approval holder of the hose may be also the hose manufacturer.

The assembly instruction shall be written in the language of the country to which the type will be delivered, or at least in English. It shall include detailed characteristics of equipment used for the assembling operation." renumber Paragraphs 2.7.1. (former) 2.7.2., 2.7.2.1., 2.7.2.2., 2.7.2.3., 2.7.3., 2.7.3.1.

as paragraphs 2.7.2, 2.7.3, 2.7.3.1, 2.7.3.2, 2.7.3.3, 2.7.4, 2.7.4.1

New paragraph 2.7.4.1., amend to read:

"2.7.3.4.1. The hose assembly (hose with couplings) has to withstand during five minutes a gas pressure of 1,015 kPa without any leakage."

Insert a new paragraph 2.7.4.2 to read:

"2.7.4.2 If the hose assembly is assembled by a company other than the manufacturer it has to withstand during five minutes a gas pressure of 1,015 kPa without any leakage."

Insert a new paragraph 3.7.1 to read:

"3.7.1 If hose and couplings are not assembled by the approval holder the approval of the hose assembly shall consist of

- hose(s) 1/,
- couplings and
- assembly instruction.

Hose may be previously type approved in accordance with paragraphs 1.1 to 1.5. The type approval holder of the hose may be also the hose manufacturer The assembly instruction shall be written in the language of the country to which the type will be delivered, or at least in English. It shall include detailed characteristics of equipment used for the assembling operation."

renumber Paragraphs 3.7.1. (former) 3.7.1.1., 3.7.1.2., 3.7.1.3, 3.7.2., 3.7.2.1

as paragraphs 3.7.2, 3.7.2.1, 3.7.2.2, 3.7.2.3, 3.7.3, 3.7.3.1

New paragraph 3.7.3.1., amend to read:

"3.7.2.3.1. The hose assembly (hose with couplings) has to withstand, during five minutes, a gas pressure of 3,000 kPa without any leakage."

Insert a new paragraph 3.7.3.2 to read:

"3.7.3.2 If the hose assembly is assembled by a company other than the manufacturer it has to withstand during five minutes a gas pressure of 3,000 kPa without any leakage."

II. Justification

The proposal of amendments to the current Regulation contained in the informal document GRSG-102-20 would impede, in practice, the retrofit system manufacturer or the vehicle manufacturer to hold the type-approval of the hose assembly only and not even of the flexible hose, or vice versa would force the hose manufacturer to hold the type-approval of the hose assembly and not of the flexible hose only.

As highlighted in the informal document tabled by AEGPL in the 101th GRSG session (GRSG-101-22), the possibility to type-approve flexible hoses separately and prior to hose assembly approval, in accordance with the relevant Annex 8 provisions, is a safe procedure since the final result is the sum of two subsequent valid approvals whose respective liability are insured.

It represents an indispensable flexibility for the industry, beneficial to both assembling manufacturers and hose manufacturers.

Therefore it should be retained and better clarified.

To this end, the present proposal aims at introducing:

1. specific provisions that clearly stipulate the possibility to type-approve the flexible hose separately and prior to hose assembly approval (see amends to 1.7.1, 2.7.1, 3.7.1)

2. a specific appendix of the communication for approval that formalizes the "linkage" between the hose assembly and the flexible hose(s) (see amends to par. 5.3 and to Annex 2B).

Through that appendix the authority will be able to verify, also during inspections, the right correspondence between the hose assembly and the flexible hose(s).

It is noted that the present proposal reproduces – with some needed adaptations - what is already foreseen by the Regulation in the case of the system "container and its accessories", that are allowed to be subject to distinct type-approvals and to bear different approval numbers, while their compatibility is attested by a suitable documentation (appendix 1 to Annex 2B).