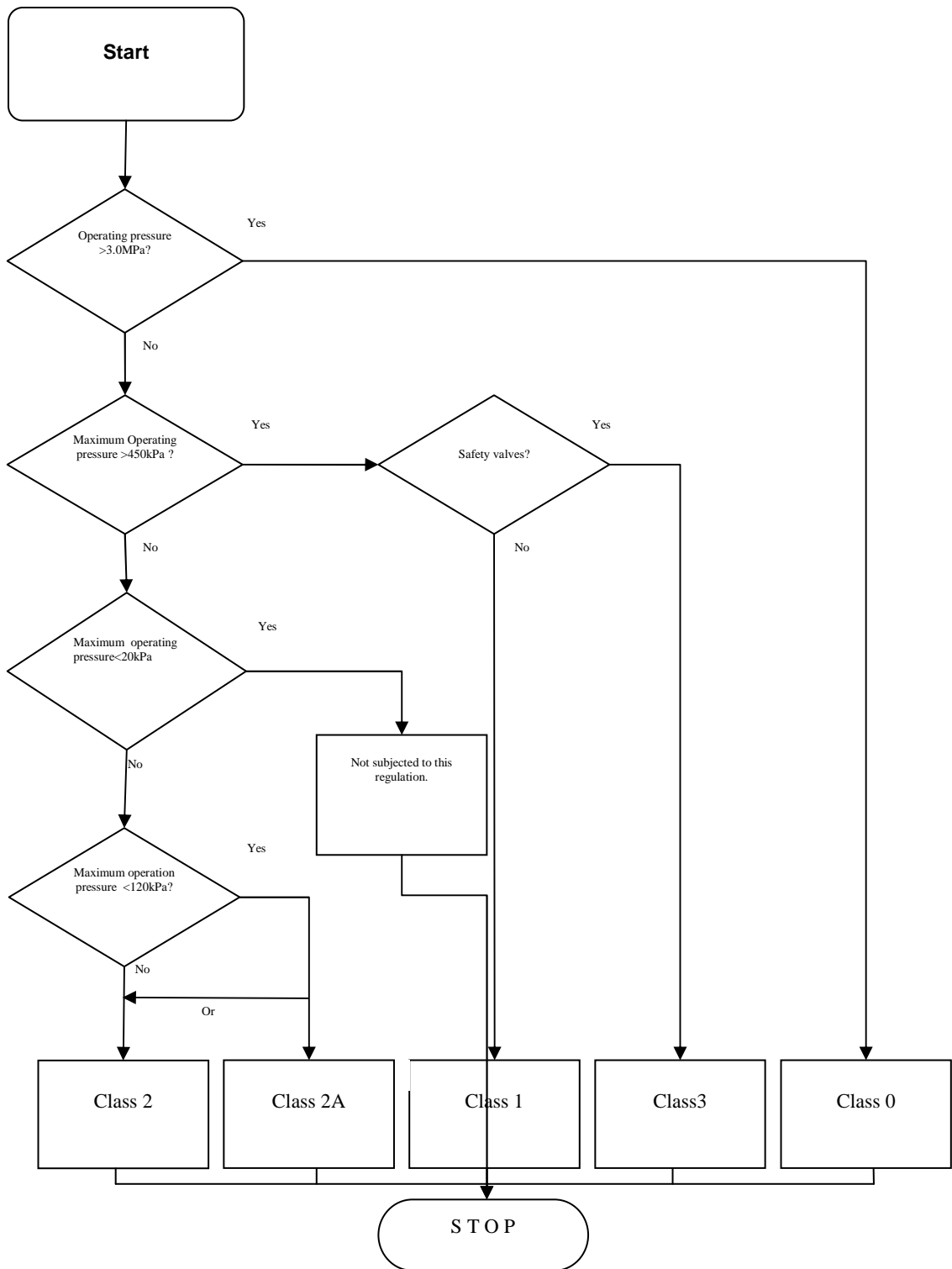


**Comments on ECE/TRANS/WP.29/GRSG/2011/14 (Draft amendment to Regulation No. 67/01 by the expert from the Netherlands)**

*Paragraph 2, amend the text to read:*

"Class 0 High pressure parts including tubes and fittings containing liquid LPG with a pressure  $\geq 3,000$  kPa"

Figure 1, amend as follows :



**Justification:**

According to the present definition, that is not intended to be modified by the document ECE/TRANS/WP.29/GRSG/2011/14, Class 1 includes parts containing liquid LPG at pressure equal to 3,000 kPa. Then, Class 0 has to include parts containing liquid LPG at pressure above 3,000 kPa.

*Paragraph 6.15.13.1.2, amend to read:*

"6.15.13.1.2. Service valves of Class 1 shall withstand a pressure of 6,750 kPa in the open and closed position.

Service valves of Class 0 shall withstand a pressure of  $WP \times 2.25$  kPa in the open and closed position."

**Justification:**

In the second line, it is not correct to report the pressure-measurement unit.

*Insert new paragraph 17.6.1.3, to read:*

"17.6.1.3 Notwithstanding the provision of paragraph 17.6.1.2, in case of liquid injection systems, if a fuel recirculation is required to purge the system from gas bubbles (vapour lock), it is allowed to keep the remotely controlled service valve with excess flow valve open for a period not longer than 10 seconds before starting the engine in LPG running mode."

*Insert new paragraph 17.9.5, to read:*

"17.9.5. Notwithstanding the provision of paragraph 17.9.4, in case of liquid injection systems, if a fuel recirculation is required to purge the system from gas bubbles (vapour lock), it is allowed to keep the remotely controlled shut-off valve open for a period not longer than 10 seconds before starting the engine in LPG running mode and during the fuel switching-over."

**Justification:**

In case of hot start and fuel switching-over, the LPG direct injection requires a phase of cooling and purging of bubbles (vapor lock) in the refueling system parts located in the engine compartment and under the bodywork.

To operate this phase it is necessary to flow some LPG for a very limited period before starting the engine and during the fuel switching-over.

*Annex 3, paragraph 5.3 and 5.4, amend the text to read :*

"5.3	Classification pressure: <del>3,000 kPa</del>	
	<b>Parts of Class 0</b>	<b>WP declared</b>
	<b>Parts of Class 1</b>	<b>3,000 kPa</b>

*Annex 4, paragraph 2, amend the text to read :*

" 2 Component classification (according to Figure 1, para. 2.): ~~Class 1~~  
**Class 0 for the part which is in contact with liquid LPG at a pressure >3,000 kPa;**  
**Class 1 for the part which is in contact with liquid LPG at a pressure ≤3,000 kPa. "**

*Annex 6, paragraph 2, amend the text to read:*

"2. Component classification (according to Figure 1, para. 2.):  
Class 0: for the part which is in contact with ~~the~~ **LPG at a pressure > 3,000 kPa of the containers.**  
Class 1: for the part which is in contact with the pressure ≤ **3,000 kPa of the containers.**  
Class 2: for the part which is in contact with the regulated pressure and with a maximum regulated pressure during operation of 450 kPa.  
Class 2A: for the part which is in contact with the regulated pressure and with a maximum regulated pressure during operation of 120 kPa. "

*Annex 7, paragraph 1.3*, amend the text to read:

"1.3. Classification pressure: 3,000 kPa **or WP declared if > 3,000 kPa.**"

*Annex 7, paragraph 3.3.*, amend the text to read:

"3.3. Classification pressure: 3,000 kPa **or WP declared if > 3,000 kPa.**"

**Justification:**

These corrections are the consequences of the correction of the definition for class 0 in paragraph 2 of this regulation.

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