

**Comments on UN Regulation No. 110 document ECE/TRANS/WP.29/2013/101:
Draft Supplement 1 to the 01 series of amendments to Regulation No. 110 (CNG
vehicles) regarding safety relevant issues of LNG systems for vehicle application**

Germany wants to provide some technical and editorial comments on UN Regulation No. 110, ECE/TRANS/WP.29/2013/101 according safety relevant issues that might need additional consideration. A working document will be prepared for the 106th session of GRSG.

It is planned to address the following issues:

1. UN Regulation No. 110 specifies a safety system for preventing the LNG container from being overfilled, but there are neither requirements for the safety and the function of this equipment nor performance tests. For this reason Germany is going to recommend requirements and performance tests similar to the ones for the liquid state of hydrogen (LH2) as described in Commission Regulation (EU) No 406/2010, part 3, 6.3.9.
2. Definition 4.11. of the Regulation stipulates that: "Other parts downstream from the vaporizer shall be considered as CNG components". But there is no safety equipment that prevents the vaporizer from flooding by LNG which could lead to cold temperatures lower than -40°C downstream of the vaporizer and destruction of the CNG components that may not be designed for cold temperatures lower than -40°C. For this reason, Germany is going to recommend a safety system against flooding by LNG which shall be type approved.
3. In addition to these technical comments, some editorial remarks regarding the references in Annex 3B, section 3.4.1 will be addressed.