

Terms of Reference to create an Informal GRSG group on NGV-R.110

A. INTRODUCTION

1. Natural gas vehicle (NGV) industry experts propose to establish an informal GRSG group to review and recommend revisions to UN Regulation No. 110, preparing such proposals with all interested stakeholders, Contracting Parties, industry and other NGOs. UN Regulation No. 110 deals with approval of specific components and their installation on motor vehicles using compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system with regard to safety. As such it also relates directly to vehicle approval based on the adequacy of the referenced components and their approval.

2. The Regulation has undergone many amendments and contains references to other standards and regulations that also may have been changed so a new consolidation and harmonization of UN Regulation No. 110 within the regulation itself and in accordance with other standards and regulations is considered by the stakeholders to be appropriate at this time.

3. Some of the following issues, for example, would need to be considered for amending and updating:

- (i) General safety provisions
- (ii) Definitions
- (iii) Approvals for specific components
- (iv) Markings
- (v) Specification of components
- (vi) Mixed operation gas/gasoline
- (vii) Tank/cylinder valves
- (viii) Limitation of component leakage
- (ix) Testing requirements of components

B. OBJECTIVE OF THE INFORMAL WORKING GROUP

1. The general mandate would be to consolidate existing amendments to UN Regulation No.110 in light of technical progress of other gaseous fuel regulations and standards and, where necessary, amend UN Regulation No. 110 to promote improved clarity and harmonization.

2. Tasks: The group will review UN Regulation No. 110 in its entirety in order clarify and harmonize all aspects of the Regulation and related requirements for light-duty vehicles, categories M₁ and N₁. It will then review the requirements

for the other categories of vehicles as may be required and necessary. The group would:

- (i) Identify aspects of the above-mentioned Regulation requiring improvement to avoid difficulties in type approval of components and vehicles designed for gaseous fuels, in the light of adaptation to technical progress, of the coming to the market of new technologies and of the latest safety requirements of the Contracting Parties, in particular the European Union. The updated requirements will tend to be performance oriented as deemed appropriate.
- (ii) Harmonize, to the best extent possible, provisions related to international and national standards that are referenced throughout UN Regulation No.110 including but not necessarily limited to standards ISO, ASTM, BSI, EN, SAE, etc.¹
- (iii) Develop draft revisions based on the above-mentioned regulations in order to resolve any difficulties or contradictions and submit them for consideration by GRSG.

C. RULES OF PROCEDURE

1. Organization:
 - (i) Chair: KIWA, The Netherlands
 - (ii) Secretariat: NGV Global
 - (iii) Co-Secretariat as may be determined
2. Membership: Open to all government, industry and other parties affiliated with UN/ECE, with an interest in gas-fuelled vehicles.
3. Meetings: Wherever possible, meetings will be linked to the GRSG sessions, however, additional meetings, when deemed necessary, will be included in between these GRSG-linked meetings. Arrangements for teleconferencing to meetings will be attempted, to the best extent possible.
4. All working documents, agendas and reports will be posted on the GRSG web site.

D. TIMELINE

1. Initial mandate requested for 3 years.

¹ International Organization for Standardization; American Society for Testing and Materials; British Standards Institute; European Norms; Society of Automotive Engineering.