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Item 5.5. of the provisional agenda

**REVISED PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 110
(Specific components for CNG)**

Submitted by the expert from the European Natural Gas Vehicle Association (ENGVA)

Note: The text reproduced below was prepared by the expert from ENGVA in order to amend the text of the Regulation with regard to the harmonization of fuelling connectors. This Revision reflects the agreement reached at the fifty-first GRPE session to insert a figure of the refuelling connector including the dimensions (ECE/TRANS/WP.29/GRPE/51, para. 33). The modifications to the current text of the Regulation are marked in **bold** characters.

Note: This document is distributed to the Experts on Pollution and Energy only.

A. PROPOSAL

Annex 4F, insert a new paragraph 1.1., to read:

"1.1. The refuelling connector (receptacle) for light duty vehicles (classes M₁ and N₁ vehicles) 1/, designed for service pressure of 20 MPa (200 bar), shall be in accordance to ISO 14469-1 "Road Vehicles compressed Natural Gas (CNG) refuelling connector – part 1: 20 MPa (200 bar) connector" (First edition 2004-11-01). Therefore, for this component, compliance with specific tests contained in this Regulation, particularly to subsequent paragraphs 2. and 3., is not required.

A receptacle shall comply with the design specification detailed in figure 1.

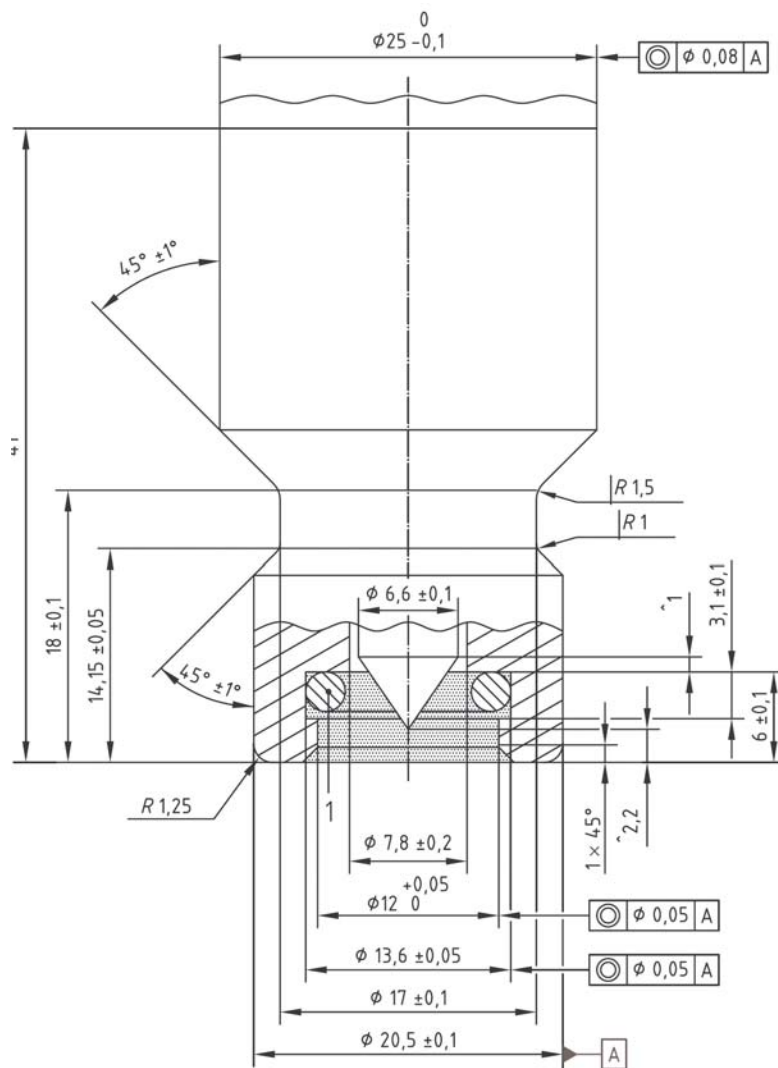


Fig. 1 Standard connector (receptacle) dimensions [mm]"

Insert new footnote 1/, to read:

"1/ As defined in Annex 7 to the Consolidated Resolution on the Construction of Vehicles (R.E.3) (TRANS/WP.29/78/Rev.1/Amend.2)."

B. JUSTIFICATION

Today a number of different types of fuelling connectors are exported all around the world. Customers who travel with their natural gas vehicles in different countries as well as CNG component suppliers require the harmonization of the fuelling connector. For drivers, it allows easy fuelling regardless of location and eliminates the need for adaptors to fit different fuelling connectors. For equipment suppliers, it means that only one fuelling connector design can apply to all markets, thus reducing the cost of manufacturing and the cost to the customer. Recently, approved ISO 14469-1 standard for 200 bar (20 MPa) connector for light-duty vehicles gives the opportunity to adopt a unique, worldwide recognized and approved fuelling connector.

ISO is now also preparing a similar standard for heavy-duty CNG vehicles: ISO DIS 14469-2 "Road vehicles Compressed Natural Gas (CNG) refuelling connector – part 2: 20 MPa (200 bar) connector size 2". Finally, ISO is also preparing a similar standard for CNG vehicles for higher service pressure: ISO DIS 14469-3 "Road vehicles Compressed Natural Gas (CNG) refuelling connector – part 3: 25 MPa (250 bar) connector".
