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## Natural gas vehicles - LNG vehicle fuelling procedures

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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ICS 43.080.01; 75.200

English Version

## Natural gas vehicles - LNG vehicle fuelling procedures

Véhicules au gaz naturel - Procédures de ravitaillement  
des véhicules GNLErdgasfahrzeuge - Betankungsabläufe für LNG  
Fahrzeuge

This European Standard was approved by CEN on 24 June 2024.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 17963:2024) has been prepared by Technical Committee CEN/TC 326 “Natural gas Vehicles”, the secretariat of which is held by TSE.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2025, and conflicting national standards shall be withdrawn at the latest by January 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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## **Introduction**

This document addresses the general operational and safety instructions for fuelling of LNG vehicles. Training of LNG vehicle drivers is not part of this procedure.

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## 1 Scope

This document gives guidelines for safe fuelling operations of vehicles that use liquefied natural gas (LNG) as a fuel for propulsion, covering the activities and procedures to be followed for safe operation. It provides procedures applicable to different fuelling systems and technologies.

NOTE Regarding the responsibility surrounding the training of drivers of LNG vehicles, see the framework of Directive 89/391 EEC.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 511, *Protective gloves against cold*

EN ISO 16321-1, *Eye and face protection for occupational use — Part 1: General requirements (ISO 16321 1)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

### 3.1

#### **LNG vehicle fuel system**

assembly of components (tank(s), valves, flexible fuel lines, etc.) and connecting parts (rigid fuel lines, pipes fitting, etc.) fitted on motor vehicles using LNG in their propulsion system

### 3.2

#### **liquefied natural gas**

#### **LNG**

natural gas that has been liquefied, after processing, for storage or transportation purposes used as a transport fuel, regardless of its production pathways (e.g. renewable, synthetic or fossil)

### 3.3

#### **vehicle tank**

cryogenic tank mounted on a vehicle for the storage of LNG as a fuel

### 3.4

#### **ignition source**

source of energy sufficient to ignite a flammable atmosphere

### 3.5

#### **dispenser**

equipment through which the liquefied natural gas is supplied to the vehicle