

Tanks for transport of dangerous goods - Digital interface for the data transfer between tank vehicle and with stationary facilities - Part 2: Commercial and logistic data

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|   |  |
|---|--|
| See Eesti standard EVS-EN 15969-2:2017 sisaldab Euroopa standardi EN 15969-2:2017 ingliskeelset teksti.             | This Estonian standard EVS-EN 15969-2:2017 consists of the English text of the European standard EN 15969-2:2017.                  |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas   | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.12.2017. | Date of Availability of the European standard is 13.12.2017.   |
| Standard on kättesaadav Eesti Standardikeskusest.   | The standard is available from the Estonian Centre for Standardisation.  |

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 35.240.60

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Koduleht [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto:info@evs.ee)

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage [www.evs.ee](http://www.evs.ee); phone +372 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

**Tanks for transport of dangerous goods - Digital interface  
for the data transfer between tank vehicle and with  
stationary facilities - Part 2: Commercial and logistic data**

Citernes destinées au transport de matières  
dangereuses - Interface numérique pour le transfert de  
données entre des véhicules-citernes et des  
installations fixes - Partie 2: Données commerciales et  
logistiques

Tanks für die Beförderung gefährlicher Güter - Digitale  
Schnittstelle für den Datenaustausch zwischen  
Tankfahrzeugen und stationären Einrichtungen - Teil  
2: Kommerzielle und logistische Daten

This European Standard was approved by CEN on 15 October 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

Page

|  |    |
|--|----|
| European foreword.....                                   | 3  |
| Introduction .....                                       | 5  |
| 1 Scope.....   | 7  |
| 2 Normative references.....                              | 7  |
| 3 Terms and definitions .....                            | 7  |
| 4 Files .....  | 8  |
| 4.1 Format identifiers .....                             | 8  |
| 4.2 Relations.....                                       | 9  |
| 4.3 File naming conventions.....                         | 10 |
| 5 Fields of special types.....                           | 11 |
| 5.1 Text module reference.....                           | 11 |
| 5.2 Geo-Coordinates .....                                | 11 |
| 5.3 UTF-8 strings.....                                   | 11 |
| 6 Price calculation rules.....                           | 12 |
| 6.1 General.....   | 12 |
| 6.2 Low volume (surcharge).....                          | 12 |
| 6.3 Pricing of packed products, container, pieces.....   | 12 |
| 6.4 Taxes.....   | 13 |
| 7 Description of tour management .....                   | 13 |
| 7.1 Handling of several tours .....                      | 13 |
| 7.2 Handling of a pseudo-tour with a pool of orders..... | 13 |
| 7.3 Handling of orders .....                             | 13 |
| 7.4 Handling of products .....                           | 14 |
| 8 Fields and records of RC_File .....                    | 14 |
| 9 Multi-Order Data (Subnode RC_FILE) .....               | 38 |
| 9.1 General.....   | 38 |
| 9.2 Node RC_File.....                                    | 38 |
| 9.3 Information concerning application.....              | 39 |

## European foreword

This document (EN 15969-2:2017) has been prepared by Technical Committee CEN/TC 296 “Tanks for the transport of dangerous goods”, the secretariat of which is held by AFNOR.

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 June 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.

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.

This document supersedes EN 15969-2:2011.

With regard to EN 15969-2:2011 the following fundamental changes are given:

- fields for air craft refilling added.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

EN 15969, *Tanks for transport of dangerous goods — Digital interface for the data transfer between tank vehicle and with stationary facilities*, consists of 2 parts:

- *Part 1: Protocol specification — Control, measurement and event data;*
- *Part 2: Commercial and logistic data.*

This European Standard forms part of a coherent standards programme comprising the following standards:

- EN 13616-1, *Overfill prevention devices for static tanks for liquid fuels — Part 1: Overfill prevention devices with closure device;*
- EN 13616-2, *Overfill prevention devices for static tanks for liquid fuels — Part 2: Overfill prevention devices without a closure device;*
- EN 13922, *Tanks for transport of dangerous goods — Service equipment for tanks — Overfill prevention systems for liquid fuels;*
- EN 14116, *Tanks for transport of dangerous goods — Digital interface for product recognition devices for liquid fuels;*
- EN 15207, *Tanks for the transport of dangerous goods — Plug/socket connection and supply characteristics for service equipment in hazardous areas with 24 V nominal supply voltage;*
- EN 15208, *Tanks for transport of dangerous goods — Sealed parcel delivery systems — Working principles and interface specifications;*
- EN 15969-1, *Tanks for transport of dangerous goods — Digital interface for the data transfer between tank vehicle and with stationary facilities — Part 1: Protocol specification - Control, measurement and event data.*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

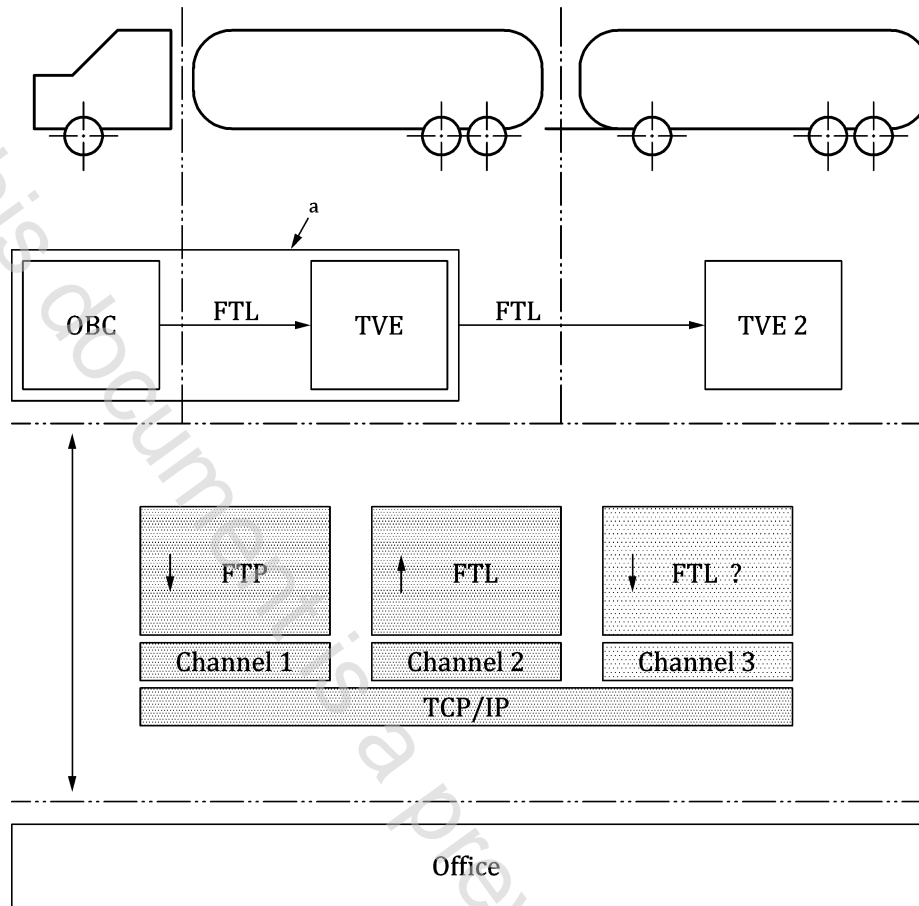
## Introduction

FTL is an acronym for **Fuel Truck Link**, the interface between electronic system(s) on board of a tank truck (Tank-Vehicle-Equipment) and any external computer, Part 2 mainly for a host installed in the office and connected via Internet (TCP/IP); for illustration, see Figure 1.

This European Standard specifies data format for all interconnecting communication paths for commercial issues.

This European Standard offers the user following features:

- multiple orders (batch processing);
- pricing;
- master data (e.g. products, customers, drivers, taxes);
- additional texts for the printout;
- information for the drivers;
- tour management;
- data for invoicing with surcharge;
- data for delivery packaged goods;
- handle planned and unplanned deliveries.

**Key**

→ direction of communication (client → server)

a may be either two independent units or one single unit which incorporates both functions OBC and TVE

**Figure 1 — Communication structure**



## 1 Scope

This European Standard specifies the data structure needed for tour management, scheduling orders of measured and unmeasured products online to the truck. Processed orders are transferred back to the host in the office at once or later every time the truck is online.

It specifies the transfer of commercial and logistic data between transport vehicle equipment, on board computer of the tank vehicle and stationary facilities for all communication channels between these parties.

This document should only be used in conjunction with EN 15969-1 and should not modify or override any of the requirements of EN 15969-1.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14116, *Tanks for transport of dangerous goods — Digital interface for product recognition devices for liquid fuels*

EN 15969-1:2017, *Tanks for transport of dangerous goods — Digital interface for the data transfer between tank vehicle and with stationary facilities — Part 1: Protocol specification — Control, measurement and event data*

EN ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes (ISO 3166-1)*

ISO 639-1, *Codes for the representation of names of languages — Part 1: Alpha-2 code*

ISO 4217, *Codes for the representation of currencies*

ISO/IEC 10646:2014, *Information technology — Universal Coded Character Set (UCS)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15969-1:2017 and the following apply.

### 3.1

#### **dispatcher**

person who manages tour at the host system

### 3.2

#### **operator**

#### **driver**

person who operates the truck and the truck management computer

### 3.3

#### **tour**

set of at least one 'Order Record' and related records, which describes a collection of stops at different customers and the ordered products, so that the driver knows where to go and what to deliver