ICS 23.040.01, 75.200 SLOVENSKÁ TECHNICKÁ NORMA November 2022

STN	**Plynárenská infraštruktúra Systémy manažérstva bezpečnosti (SMS) a systémy manažérstva integrity plynovodov (PIMS) Funkčné požiadavky**	**STN EN 17649** 38 6439

Gas infrastructure - Safety Management System (SMS) and Pipeline Integrity Management System (PIMS) - Functional requirements

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/22

Obsahuje: EN 17649:2022

Oznámením tejto normy sa ruší
STN EN 16348 (38 6439) z decembra 2013

STN EN 15399 (38 6438) z júna 2019

135763

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 17649

August 2022

ICS 23.040.01; 75.200; 03.100.70 Supersedes EN 16348:2013, EN 15399:2018

English Version

Gas infrastructure - Safety Management System (SMS) and Pipeline Integrity Management System (PIMS) - Functional requirements

Infrastructures gazières - Système de management de la sécurité (SMS) et système de management de l'intégrité des canalisations (PIMS) - Exigences fonctionnelles

Gasinfrastruktur - Sicherheitsmanagementsystem und Rohrleitungsintegritätsmanagementsystem - Funktionale Anforderungen

This European Standard was approved by CEN on 27 June 2022.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 17649:2022 E

Contents

Page

European foreword

This document (EN 17649:2022) has been prepared by Technical Committee CEN/TC 234 “Gas infrastructure”, the secretariat of which is held by DIN.

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 February 2023, and conflicting national standards shall be withdrawn at the latest by February 2023.

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 15399:2018, and EN 16348:2013.

New points for attention in this document are adaptations to climate change and the injection of hydrogen and other gases into natural gas networks. As gases other than natural gas will be more often injected into existing natural gas networks in the future, Management of Change has been introduced in this document to ensure that all relevant safety aspects are taken into account when this occurs.

There is a complete suite of functional standards prepared by CEN/TC 234 “Gas infrastructure” to cover all parts of the gas infrastructure system from the point of entry into the gas infrastructure up to the point of delivery of the customers, whether domestic, commercial or industrial.

In preparing this document, a basic understanding of Management Systems and gas infrastructure by the user has been assumed.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

Introduction

This document provides guidance on the establishment, implementation and maintenance of a safety management system, all in order to provide an efficient gas transmission and distribution infrastructure for the safe and secure conveyance of gas.

This document supports a System Operator (SO) in the implementation of a management system following the Plan-Do-Check-Act (PDCA) methodology, described in Annex A. It can be used in conjunction with ISO Management Systems such as EN ISO 9001, EN ISO 14001, ISO 31000 and also in case of assessment or certification by a third party.

The main objectives of this document are to provide the necessary requirements:

— to be included in a management system related to safety and efficiency of the main processes being the life cycle stages of gas infrastructure (design, construction and testing, commissioning/ decommissioning, operation, maintenance and permanently taken out of service) for all of the SO's gas conveying assets. In practice, this is expressed on methods and organisational features as well as technical aspects;

— in demonstrating the competencies required for employees and any contractors involved in the processes mentioned above.

It is at the SO's discretion to include other objects and structures in his own management system.

The structure of this document is based on the ISO High Level Structure of standard on Management Systems (ISO/IEC Directives, Part 1, Consolidated ISO Supplement, 2015, Annex SL (normative) Proposals for management system standards).

The technical contents are in line with EN 12007 (all parts) and EN 1594.

1 Scope

This document specifies requirements on the development and implementation of a Safety Management System (SMS) and a Pipeline Integrity Management System (PIMS). The SMS is applicable for system operators of a gas infrastructure. The PIMS is applicable for system operators of gas infrastructure with a maximum operating pressure (MOP) over 16 bar.

This document refers to all activities and processes related to safety aspects and performed by system operators of a gas infrastructure, including those activities entrusted to contractors. It includes safety-related provisions on operation of the gas infrastructure.

This document is applicable to infrastructure for the conveyance of processed, non-toxic and non-corrosive natural gas according to EN ISO 13686 and gases such as biomethane and hydrogen and to mixtures of these gases with natural gas.

This document covers also gases classified as group H, that are to be transmitted, injected into and from storages, distributed and utilized, as specified in EN 16726. For the requirements and test methods for biomethane at the point of entry into a natural gas network, reference is made to EN 16723-1.

This document can be applied for gas infrastructure conveying gases of the 3rd gas family as classified in EN 437 or for other gases such as carbon dioxide.

Specific requirements for occupational health and safety are excluded from this document. For these, other European and/or international standards, e.g. ISO 45001, apply.

This document specifies common basic principles for gas infrastructure. It is important that users of this document are expected to be aware that more detailed national standards and/or codes of practice exist in the CEN member countries. This document is intended to be applied in association with these national standards and/or codes of practice setting out the above-mentioned basic principles.

In the event of conflicts in terms of more restrictive requirements in national legislation/regulation with the requirements of this document, the national legislation/regulation takes precedence as illustrated in CEN/TR 13737 (all parts).

NOTE CEN/TR 13737 (all parts) contains:

— clarification of relevant legislation/regulations applicable in a country;

— if appropriate, more restrictive national requirements;

— national contact points for the latest information.

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 1594, *Gas infrastructure - Pipelines for maximum operating pressure over 16 bar - Functional requirements*

EN 12007 (all parts), *Gas infrastructure - Pipelines for maximum operating pressure up to and including 16 bar*

EN 12186, *Gas infrastructure - Gas pressure regulating stations for transmission and distribution - Functional requirements*

EN 12327, *Gas infrastructure - Pressure testing, commissioning and decommissioning procedures - Functional requirements*