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Gas supply systems - Frame of reference regarding Pipeline Integrity Management System (PIMS)

Systèmes d'alimentation en gaz - Cadre de référence portant sur le système de management de l'intégrité des canalisations (PIMS)

Gasversorgungssysteme - Liste der Referenzen für ein Leitungsintegritäts-Managementsystem (PIMS)

This Technical Specification (CEN/TS) was approved by CEN on 25 June 2005 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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Foreword

This Technical Specification (CEN/TS 15173:2006) has been prepared by Technical Committee CEN/TC 234 “Gas supply”, the secretariat of which is held by DIN.

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

There is a complete suite of functional standards prepared by CEN/TC 234 "Gas Supply" to cover all parts of the gas supply system from the input of gas to the transmission system up to the inlet connection of the gas appliances, whether for domestic, commercial or industrial purposes.

In preparing this Technical Specification a basic understanding of Quality Management Systems and gas supply systems by the user has been assumed.

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

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Introduction

This Technical Specification is a copy of document WOC4/SG4.2 of the International Gas Union (IGU) as presented at the symposium of IGU in Tokyo (June 2003).

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1 Scope

The scope is defined in 4.2 "Boundary of the PIMS".

2 Normative references

Not applicable.

3 Symbols and abbreviations

CEN - Centre Européen de Normalisation

CMS – Company Management System

EGIG - European Gas pipeline Incident data Group

EN – European standard elaborated by CEN

FMECA - failure modes, effects and criticality analysis

GIS - Geographical Information System

IGU – International Gas Union

ISO – International Standardisation Organisation

PDCA - Plan-Do-Check-Act cycle

PIMS – Pipeline Integrity Management System

WOC/SG – Study Group of an IGU Working Committee

4 PIMS

4.1 General

PIMS is defined as Pipeline Integrity Management System. It is a safety management system, whose field is pipeline integrity. The field does not cover occupational health.

Each natural gas pipeline operator has a system to manage all its resources and activities. This management system is specific to each operator. It generally integrates all the following activities: storage, compression, transportation and delivery of natural gas (see diagram below).

PIMS is based on such principles as:

- adoption of high technological standards in construction;
- carrying out of proactive measures for ensuring that the pipeline system is maintained fit for purpose;
- working out of emergency procedures;
- incidents investigation;

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