

SLOVENSKI STANDARD SIST-TS CEN ISO/TS 17969:2015

01-september-2015

Petrokemična industrija ter industrija za predelavo nafte in zemeljskega plina - Smernice o kompetencah osebja (ISO/TS 17969:2015)

Petroleum, petrochemical and natural gas industries - Guidelines on competency for personnel (ISO/TS 17969:2015)

Erdöl-, petrochemische und Erdgasindustrie - Richtlinien bezgl. der Kompetenz von Personal (ISO/TS 17969:2015) TANDARD PREVIEW

(standards.iteh.ai) Industries du pétrole, de la pétrochimie et du gaz naturel - Lignes directrices sur la compétence du personnel (ISO/TS_17969;2015)_{S 17969:2015}

https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-

Ta slovenski standard je istoveten z: CEN ISO/TS 17969-2015

ICS:

03.100.30 Vodenje ljudi Management of human

resources

75.020 Pridobivanje in predelava Extraction and processing of

nafte in zemeljskega plina petroleum and natural gas

SIST-TS CEN ISO/TS 17969:2015 en,fr,de

SIST-TS CEN ISO/TS 17969:2015

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST-TS CEN ISO/TS 17969:2015</u>

https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015

TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

CEN ISO/TS 17969

June 2015

ICS 03.100.30

English Version

Petroleum, petrochemical and natural gas industries - Guidelines on competency for personnel (ISO/TS 17969:2015)

Industries du pétrole, de la pétrochimie et du gaz naturel -Lignes directrices sur la compétence du personnel (ISO/TS 17969:2015) Erdöl-, petrochemische und Erdgasindustrie - Richtlinien bezgl. der Kompetenz von Personal (ISO/TS 17969:2015)

This Technical Specification (CEN/TS) was approved by CEN on 23 May 2015 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.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

<u>SIST-TS CEN ISO/TS 17969:2015</u> https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-

2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015



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

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

CEN ISO/TS 17969:2015 (E)

Contents	Page
European foreword	3

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST-TS CEN ISO/TS 17969:2015 https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015

CEN ISO/TS 17969:2015 (E)

European foreword

This document (CEN ISO/TS 17969:2015) has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries" in collaboration with Technical Committee CEN/TC 12 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries" the secretariat of which is held by AFNOR.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO/TS 17969:2015 has been approved by CEN as CEN ISO/TS 17969:2015 without any modification.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST-TS CEN ISO/TS 17969:2015</u> https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015 **SIST-TS CEN ISO/TS 17969:2015**

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST-TS CEN ISO/TS 17969:2015</u>

https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015

SIST-TS CEN ISO/TS 17969:2015

TECHNICAL SPECIFICATION

ISO/TS 17969

First edition 2015-06-15

Petroleum, petrochemical and natural gas industries — Guidelines on competency for personnel

Industries du pétrole, de la pétrochimie et du gaz naturel — Lignes directrices sur la compétence du personnel

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST-TS CEN ISO/TS 17969:2015</u> https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015



iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST-TS CEN ISO/TS 17969:2015</u> https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Contents		Page	
Forev	vord		iv
1	Scop	е	1
2	Term	is and definitions	1
3	Comp 3.1 3.2 3.3 3.4	General Benefits of a CMS Comparison of a CMS with an appraisal system Creation of a CMS 3.4.1 CMS cycle 3.4.2 Phase 1 — Establish requirements for the CMS 3.4.3 Phase 2 — Design the CMS 3.4.4 Phase 3 — Implement the CMS 3.4.5 Phase 4 — Maintain and develop competence	
4	Appli 4.1 4.2 4.3 4.4 4.5 4.6 4.7	3.4.6 Phase 5 — Verify, audit and review the CMS ication of CMS requirements to well operations personnel General Recommended risk-based approach for well operations Competency model 4.3.1 Well competency catalogue 4.3.2 Proficiency levels IDAR DELEVIEW 4.3.3 Competency profile Team competence standards iteh.ai Leadership skills Contract personnel Roadmap to ensure competency https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-	10111212131515
5	Exan	https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2- nples of competency/profiles _{sist-ts-con-iso-ts-1} 7969-2015	17
Anne	x A (inf	formative) Example competency assessment information	18
Anne	x B (inf	formative) Example of competency profile for drilling supervisor	23
Anne	x C (inf	formative) Example of competency profile for senior drilling engineer	24
Anne	x D (in	formative) Example of competency profile for well examiner	25
Anne	x E (inf	formative) Example of competency profile for operations geologist	26
Biblio	graph	y	27

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electro technical Commission (IEC) on all matters of electro technical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 67, Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries.

https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015

Petroleum, petrochemical and natural gas industries — Guidelines on competency for personnel

1 Scope

The purpose of this Technical Specification is to help members of the oil and gas industry develop, implement, maintain and improve their own competency management systems (CMS) for well operations personnel. This Technical Specification supports competency management general principles which can be applied to any operation within the industry.

The annexes to this Technical Specification list example competence profiles for positions responsible for well integrity. Annex A includes an example worksheet which can be used in performing a competency assessment, to help record the assessment results versus expectation, as well as the resulting action plan to address any gaps identified.

This Technical Specification is applicable to all operators, service companies and drilling contractors working on wells and well operations.

2 Terms and definitions

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

2.1

competence

ability to undertake responsibilities and to perform activities to a recognised standard on a regular basis

(standards.iteh.ai)

Note 1 to entry: Competence is a combination of knowledge, practical and thinking skills, and a person's behaviour.

EXAMPLE 1 McCoy's Law: competency = knowledge × skills × behaviours.

EXAMPLE 2 Bloom's taxonomy: competency = knowledge × skills × (technical + ability).

2.2

competency catalogue

hierarchical structured list of the competencies required to perform any task

2.3

proficiency level

level of ability and behaviour attributes within a specific skill

2.4

competency profile

skills and behaviour, each specified at a level of proficiency, required to perform the role or activity in line with the associated risk

2.5

competence assessment

process of judging evidence of an individual's performance against agreed competence requirements

Note 1 to entry: The result of such an assessment, potentially in combination with other factors such as work experience, will determine whether that individual has demonstrated competence and to which proficiency level.

2.6

rubric

set of assessment criteria used to describe and evaluate the important components of a task

Note 1 to entry: A rubric is an effective assessment tool, because it allows different assessors to arrive at similar conclusions when comparing performance to the guidelines shown on the rubric.

2.7

independent assessor

person carrying out an assessment who is not the direct supervisor of the person to be assessed and who is independent of the direct work group

Note 1 to entry: This person needs to be trained and qualified in assessment and debrief techniques and needs to have competence in the technical skills being assessed.

Note 2 to entry: Independence needs to be demonstrated to ensure that a balanced and fair assessment of a person's competency in the subject is completed.

2.8

safety-critical task

task performed on a safety-critical element which, if performed incorrectly due to lack of technical skills or knowledge or due to behaviour attributes, can lead to a major accident hazard

2.9

safety-critical competency

type of competence required of personnel in order to carry out an operation which, if carried out incorrectly or inadvertently, can lead to a major accident hazard

2.10

(standards.iteh.ai)

major accident

significant emission, fire or explosion resulting from uncontrolled events

https://standards.iteh.ai/catalog/standards/sist/6a72b083-26e6-4773-8ff2-

2ab7df7c0077/sist-ts-cen-iso-ts-17969-2015

3 Competency management system

3.1 General

The purpose of a competency management system (CMS) is to control, in a logical and integrated manner, a cycle of activities within the organization that ensures competency of operations personnel, particularly in safety critical activities. The CMS will enable personnel to be assessed and further developed, contributing to the goal of competent performance at work. A CMS should be user-friendly, workable and practical.

If an organization has no CMS, the recommended first step is to garner support from the very top of the organization. The system should then be constructed, involving resources from multiple levels of the organization, to create a sense of ownership.

This Technical Specification contains a number of examples of competency profiles which can be useful for an organization if it has to create profiles for their own staff.

3.2 Benefits of a CMS

An effective, appropriate CMS provides the following benefits:

- assists with compliance with regulatory requirements;
- provides a continuous performance improvement tool for the work force;
- provides a more comprehensive picture of the requirements for a job than a job description alone;