ICS 75.200 SLOVENSKÁ TECHNICKÁ NORMA Január 2020

STN	**Ropný a plynárenský priemysel Potrubné prepravné systémy Špecifikácia manažérstva integrity potrubia Časť 2: Manažérstvo integrity príbrežného potrubia počas celého životného cyklu (ISO 19345-2: 2019)**	**STN EN ISO 19345-2** 45 2224

Petroleum and natural gas industry - Pipeline transportation systems -Pipeline integrity management specification - Part 2: Full-life cycle integrity management for offshore pipeline (ISO 19345-2:2019)

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. 12/19

Obsahuje: EN ISO 19345-2:2019, ISO 19345-2:2019

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 19345-2

June 2019

ICS 75.200

English Version

Petroleum and natural gas industry - Pipeline transportation systems -Pipeline integrity management specification - Part 2: Full-life cycle integrity management for offshore pipeline (ISO 19345-2:2019)

Industries du pétrole et du gaz naturel - Systèmes de transport par conduites - Spécification de gestion de l'intégrité des conduites - Partie 2: Gestion de l'intégrité des conduites en mer pendant leur cycle de vie complet (ISO 19345-2:2019)

Erdöl- und Erdgasindustrie - Fernleitungstransportsysteme - Leitfaden für das Integritätsmanagement von Fernleitungen - Teil 2: Integritätsmanagement des vollständigen Lebenszyklus von Offshore Fernleitungen (ISO 19345-2:2019)

This European Standard was approved by CEN on 9 February 2019.

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Ref. No. EN ISO 19345-2:2019 E

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European foreword

This document (EN ISO 19345-2:2019) 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 NEN.

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of an identical text or by endorsement, at the latest by December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

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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Endorsement notice

The text of ISO 19345-2:2019 has been approved by CEN as EN ISO 19345-2:2019 without any modification.

INTERNATIONAL STANDARD

ISO 19345-2

First edition
2019-05

Petroleum and natural gas industry — Pipeline transportation systems — Pipeline integrity management specification —

Part 2: Full-life cycle integrity management for offshore pipeline

Industries du pétrole et du gaz naturel — Systèmes de transport par conduites — Spécification de gestion de l'intégrité des conduites —

Partie 2: Gestion de l'intégrité des conduites en mer pendant leur cycle de vie complet

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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 Electrotechnical Commission (IEC) on all matters of electrotechnical 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).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 2, *Pipeline transportation systems*.

A list of all parts in the ISO 19345 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document addresses the integrity of petroleum and natural gas pipelines through their entire life-cycle, from design to eventual abandonment. For this reason, considerations relating to design, construction and abandonment have been included. This approach supports the development and implementation of a holistic and integrated pipeline integrity management program that bridges between life-cycle elements and thereby avoids compartmentalizing of the pipeline life-cycle into essentially independent data and functional silos, which has traditionally been the case. The integrated approach was developed on the basis of extensive research and examination of best practices and results from pipeline integrity audits world-wide.

This document is intended to be used by companies that have not yet developed an official program or are developing a program for new pipelines. This document can also be used to guide continual improvement of existing programs by both operating companies and regulators to evaluate integrity management program effectiveness.

INTERNATIONAL STANDARD **ISO 19345-2:2019(E)**

Petroleum and natural gas industry — Pipeline transportation systems — Pipeline integrity management specification —

Part 2: Full-life cycle integrity management for offshore pipeline

1 Scope

This document specifies requirements and gives recommendations on the management of integrity of a pipeline system throughout its life cycle, which includes design, construction, commissioning, operation, maintenance and abandonment.

This document is applicable to offshore pipelines for transporting petroleum and natural gas. It is applicable to rigid steel pipelines. It is not applicable to flexible pipelines, dynamic risers or those constructed from other materials, such as glass-reinforced plastics.

NOTE 1 An offshore pipeline system extends to:

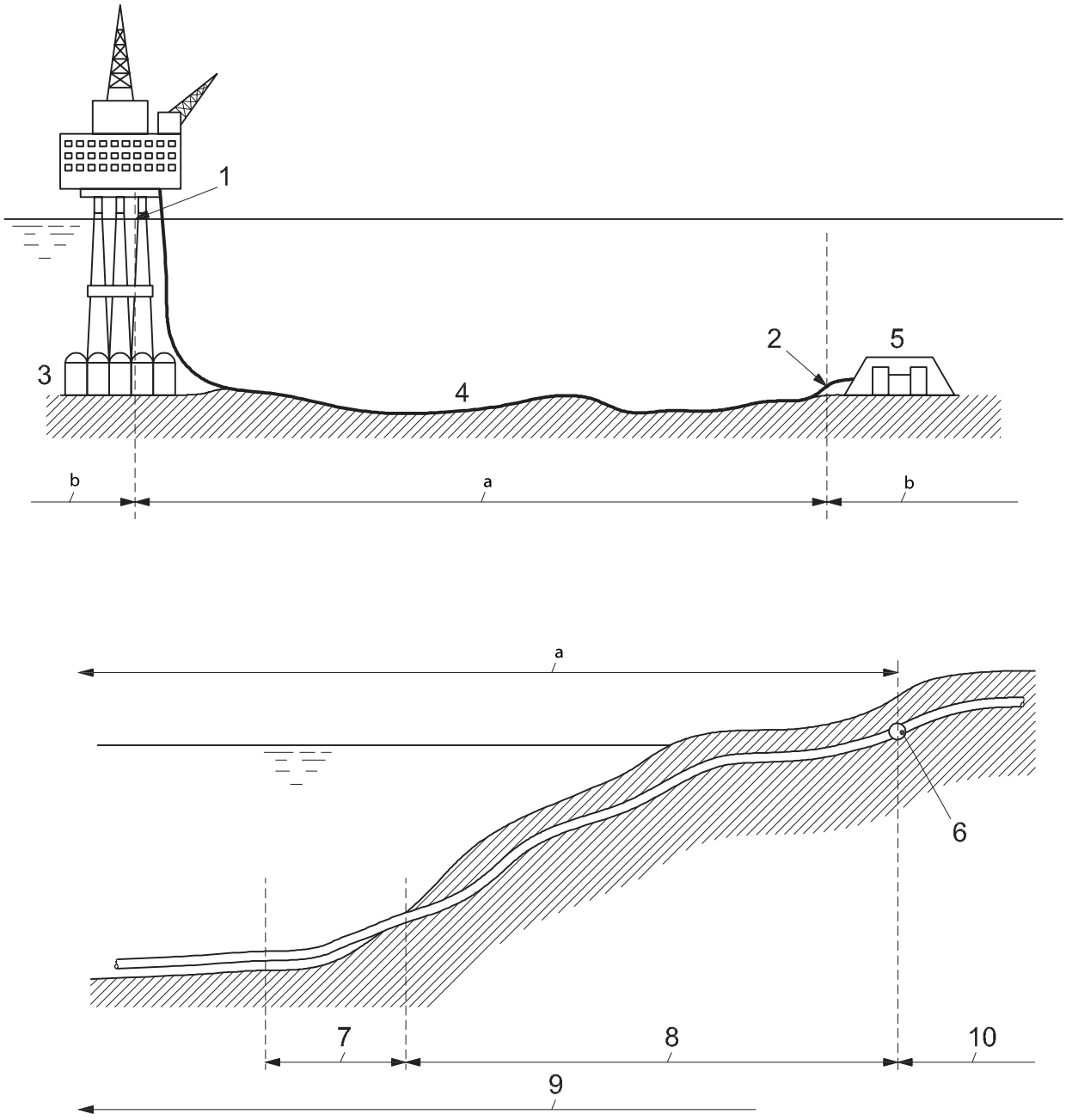
— the first valve, flange or connection above water on platform or subsea mechanical connector with subsea structure (i.e. manifold or dynamic riser);

— the connection point to the offshore installation (i.e. piping manifolds are not included);

— the first valve, flange, connection or isolation joint at a landfall, unless otherwise specified by the onshore legislation.

NOTE 2 The components mentioned above (valve, flange, connection, isolation joint) include also any pup pieces, i.e. the offshore pipeline system extends to the weld beyond the pup piece, see Figure 1.

This document is used for integrity management, which is initiated at the design and construction stage of the pipeline. Where requirements of a design and construction standard (e.g. ISO 13623) are different, the provisions of this document will enhance the design and construction from an integrity perspective.



Key

1	first valve, flange, connection or isolation joint	7	nearshore section
2	connector point to subsea piping	8	shore approach
3	topside	9	offshore section
4	pipeline system	10	onshore section
5	pipeline subsea structure	a	covered by this document
6	first valve, flange, connection or isolation joint	b	not covered by this document

Figure 1 — Extent of pipeline systems covered by this document

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.

ISO 13623, *Petroleum and natural gas industries — Pipeline transporting system*

ISO 15589-2, *Petroleum, petrochemical and natural gas industries — Cathodic protection of pipeline transportation systems — Part 2: Offshore pipelines*

ISO 31000, *Risk management — Guidelines*

IEC 31010, *Risk assessment techniques*