

SLOVENSKI STANDARD SIST EN ISO 15544:2024

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Industrija za predelavo nafte in zemeljskega plina - Plavajoči proizvodni objekti - Zahteve in smernice za ukrepanje v nujnih primerih (ISO 15544:2024)

Petroleum and natural gas industries - Offshore production installations - Requirements and guidelines for emergency response (ISO 15544:2024)

Erdöl- und Erdgasindustrie - Offshore-Produktionsanlagen - Anforderungen und Richtlinien für Notfallreaktionen (ISO 15544:2024)

Industries du pétrole et du gaz naturel - Installations de production en mer - Exigences et lignes directrices pour les interventions d'urgence (ISO 15544:2024)

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75.180.10 Oprema za raziskovanje, vrtanje in odkopavanje

Exploratory, drilling and extraction equipment

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Oil and gas industries - Offshore production installations -Requirements and guidelines for emergency response (ISO 15544:2024)

Industries du pétrole et du gaz - Installations de production en mer - Exigences et lignes directrices pour les interventions d'urgence (ISO 15544:2024) Erdöl- und Erdgasindustrie - Offshore-Produktionsanlagen - Anforderungen und Richtlinien für Notfallreaktionen (ISO 15544:2024)

This European Standard was approved by CEN on 3 June 2024.

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European foreword

This document (EN ISO 15544:2024) has been prepared by Technical Committee ISO/TC 67 "Oil and gas industries including lower carbon energy" in collaboration with Technical Committee CEN/TC 12 "Oil and gas industries including lower carbon energy" 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of an identical text or by endorsement, at the latest by December 2024, and conflicting national standards shall be withdrawn at the latest by December 2024.

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 15544:2024 has been approved by CEN as EN ISO 15544:2024 without any modification.

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International Standard

ISO 15544

Oil and gas industries — Offshore production installations — Requirements and guidelines for emergency response

Second edition 2024-06

Industries du pétrole et du gaz — Installations de production en mer — Exigences et lignes directrices pour les interventions d'urgence (https://standards.iteh.ai)

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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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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

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, *Oil and gas industries including lower carbon energy*, Subcommittee SC 6, *Process equipment, piping, systems, and related safety,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 12, *Oil and gas industries including lower carbon energy,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 15544:2000), which has been technically revised. It also incorporates the Amendment ISO 15544:2000/Amd.1:2009.

The main changes are as follows: and ards/sist/22a29c42-6cee-4556-b35c-9e51c1c4fe5d/sist-en-iso-15544-2024

- clarifications of requirements;
- editorial updates, including a merge of requirements and guidelines into one subclause for each clause;
- terms and definitions and abbreviations have been updated;
- several recommendations have been changed to requirements based on operational experiences;
- Annex G has been removed and references are made to IOGP guidelines, [10] References [11] and [12].

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 <u>www.iso.org/members.html</u>.

Introduction

Successful safety and environmental protection during the recovery of hydrocarbon resources requires a structured approach to be applied to the identification and assessment of the hazards present during the various phases in the lifecycle of an offshore installation. These principles also apply to the development of emergency response strategy, emergency response measures and procedures. Understanding of the hazards can be achieved by application of ISO 17776,^[6] which gives guidelines for hazard identification and assessment for offshore installations.

The content in this document on escape, refuge, evacuation, recovery and rescue is consistent with the content of ISO 13702^[4] but addresses in more detail how these aspects are built into development of emergency response measures.

This document has been prepared primarily to assist in the development of new installations. Retrospective application of this document is only relevant where it is reasonable to do so. During the planning of a major change to an installation there can be more opportunities to implement the requirements, and a review of this document enables identification of clauses which can be practically utilized in the change.

This document is based on an approach where the selection of measures for emergency response is determined by an evaluation of hazards on the offshore installation. The methodologies employed in this assessment and the resultant recommendations differ depending on the complexity of the production process and facilities, type of facility (i.e. open or enclosed), number of POB, and the environmental conditions associated with the location of operation.

The principal objectives of this document are to describe both the approach to be used and important considerations in determining the emergency response measures that are required on an offshore installation to:

- a) protect people;
- b) minimize impact on the environment;
- c) minimize impact on assets and operations.

The requirements in <u>Clauses 6</u> to <u>15</u> are arranged as follows. **Preview**

- Objectives identify the goals to be achieved by the emergency response measures being described.
- Functional requirements and guidelines represent the minimum conditions to meet the stated objectives. 024 The functional requirements are performance-orientated measures and, as such, are applicable to the variety of offshore installations utilized for the development of hydrocarbon resources throughout the world.
- The provisions describe recognized practices for consideration in developing the measures for emergency response.
- Functional requirements are supplemented by guidelines in developing the measures for emergency response in <u>Annexes A</u> to <u>F</u>. The guidelines and annexes are intended for use in conjunction with requirements, industry standards and individual company philosophy, to determine the measures that are necessary for emergency response.

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Oil and gas industries — Offshore production installations — Requirements and guidelines for emergency response

1 Scope

This document specifies objectives, functional requirements and guidelines for emergency response (ER) measures on installations used for the development of offshore hydrocarbon resources. It is applicable to:

- fixed offshore structures;
- floating systems for production, storage and off-loading.

NOTE For mobile offshore units, the ER plans developed in conformance with the requirements and recommendations of the International Maritime Organization (IMO) are generally adequate for the normal, independent operation of the unit in most locations. The following aspects of ER planning are not generally addressed by IMO and are topics intended for inclusion in the scope of this document where relevant to the specific installation:

- area evacuation, e.g. precautionary evacuation in areas of tropical revolving storms;
- combined operations (where an integrated command and ER system is relevant);
- arctic operations;
- uncontrolled flow from a well.

2 Normative references

There are no normative references in this document.

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3 Terms and definitions

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For the purposes of this document, the following terms and definitions apply. Internet the second statement of the second s

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at <u>https://www.electropedia.org/</u>

3.1

abandonment

act of personnel onboard leaving an installation in an *emergency* (3.7)

3.2

accommodation

place where personnel onboard sleep and spend their off-duty time

Note 1 to entry: Accommodation can include dining rooms, recreation rooms, lavatories, cabins, offices, sickbay, living quarters, galley, pantries, and similar permanently enclosed spaces.

3.3

control control of hazards limiting the extent or duration of a *hazardous event* (3.17)

3.4

central control room

place on the installation from which personnel can monitor the status of the installation, initiate appropriate shutdown actions and undertake *emergency* (3.7) communication

3.5

exercise

periodic practice event based on a potential and credible *emergency* (3.7) scenario where the *emergency response* (3.8) arrangements (including interactions with relevant external parties) are tested to verify their workability, identify improvements, and build familiarity and competence

Note 1 to entry: Exercises include emergency response drills involving routine and regular events where an emergency response action (e.g. mustering) is practiced to maintain familiarity and awareness.

3.6

embarkation area

place from which personnel abandon the installation during *evacuation* (3.13)

EXAMPLE A helideck and associated waiting area or a lifeboat or liferaft boarding area.

3.7

emergency

hazardous event (3.17) which cannot be handled by normal measures and requires immediate action to limit its extent, duration or consequences

3.8

emergency response

ER

action taken by personnel on or off the installation to control or mitigate a *hazardous event* (3.17) or initiate and execute *abandonment* (3.1)

3.9

emergency response plan (https://standards.i

ERP

systematic procedures that detail what is to be done, how, when, and by whom before, during and after the time an *emergency* (3.7) occurs

[SOURCE: ISO 27917:2017, 3.4.12, modified — The notes to entry have been deleted.]

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emergency response measure

systems, equipment and processes provided for use in the event of an *emergency* (3.7)

Note 1 to entry: This is a generic term including hardware provided for *emergency response* (3.8) as well as the planning, procedural and organizational aspects of responding to emergencies.

3.11

escape

act of personnel moving away from a hazardous event (3.17) to a place where its effects are reduced or removed

[SOURCE: ISO 13702:2024, 3.16]

3.12

escape route

route from an area of an installation leading to a *muster area* (3.24), *temporary refuge* (3.35), *embarkation area* (3.6), or means of *escape* (3.11) to the sea

3.13

evacuation

planned method of abandoning the installation