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Petroleum and natural gas industries — Control and mitigation of fires and explosions on offshore production installations — Requirements and guidelines

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- Australian Petroleum Production and Exploration Association
- Australian Pipelines and Gas Association
- Department for Energy and Mining, SA
- Department of Mines, Industry Regulation and Safety WA
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Preface

This Standard was prepared by the Standards Australia Committee ME-092, Materials, equipment, structures and related services for petroleum, petrochemical and natural gas industries.

The objective of this document is to describe the functional requirements for the control and mitigation of fires and explosions on offshore installations used for the development of hydrocarbon resources.

This document is applicable to the following:

- (a) Fixed offshore structures.
- (b) Floating systems for production, storage, and offloading.
- (c) Petroleum and natural gas industries.

This document is identical with, and has been reproduced from, ISO 13702:2015, *Petroleum and natural gas industries — Control and mitigation of fires and explosions on offshore production installations — Requirements and guidelines*.

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(i) In the source text “this international standard” should read “this document”.

(ii) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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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).

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).

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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](#).

This second edition cancels and replaces the first edition (ISO 13702:1999), which has been technically revised.

The committee responsible for this document is ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 6, *Processing equipment and systems*.

Introduction

The successful development of the arrangements required to promote safety and environmental protection during the recovery of hydrocarbon resources requires a structured approach to the identification and management of health, safety, and environmental hazards applied during the design, construction, operation, inspection, maintenance, and decommissioning of a facility.

This International Standard has been prepared primarily to assist in the development of new installations through their lifecycle. For existing installations that predate this International Standard, not all requirements are necessarily appropriate. Retrospective application of this International Standard can be undertaken where it is reasonably practicable to do so. During the planning for a major change to an installation, there will be more opportunity to implement the requirements. A careful review of this International Standard will determine those sections which can be utilized in the change.

The technical content of this International Standard is arranged as follows.

- **Objectives:** lists the goals to be achieved by the control and mitigation measures being described.
- **Functional requirements:** represent the minimum criteria to meet the stated objectives. The functional requirements are performance orientated measures and, as such, are applicable to the **This is a preview. Click here to purchase the full publication.** rces throughout the world.
- **Annex A (informative):** typical fire and explosion hazardous events.
- **Annex B (informative):** describes recognized practices to be considered in conjunction with statutory requirements, industry standards, and individual operator philosophy to determine that the measures necessary are implemented for the control and mitigation of fires and explosions. The guidelines are limited to principal elements and are intended to provide specific guidance which, due to the wide variety of offshore operating environments, cannot be applicable in some circumstances.
- **Annex C (informative):** typical examples of design requirements for large integrated offshore installations.
- **Bibliography:** lists documents to which informative reference is made in this International Standard.