Irish Standard
I.S. EN ISO 28460:2010

Petroleum and natural gas industries - Installation and equipment for liquefied natural gas - Ship-to-shore interface and port operations (ISO 28460:2010)

I.S. EN ISO 28460:2010

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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Petroleum and natural gas industries - Installation and equipment for liquefied natural gas - Ship-to-shore interface and port operations (ISO 28460:2010)

Industries du pétrole et du gaz naturel - Installations et équipements relatifs au gaz naturel liquéfié - Interface terre-navire et opérations portuaires (ISO 28460:2010)

Erdöl und Erdgasindustrie - Anlagen und Ausrüstung für Flüssigerdgas - Schnittstelle zwischen Schiff und Land und Hafenbetrieb (ISO 28460:2010)

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN ISO 28460:2010) 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 282 “Installation and equipment for LNG” the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by June 2011, and conflicting national standards shall be withdrawn at the latest by June 2011.

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.

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INTERNATIONAL STANDARD

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Petroleum and natural gas industries — Installation and equipment for liquefied natural gas — Ship-to-shore interface and port operations

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 28460 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*.

Introduction

The original liquefied natural gas (LNG) business was based on long-term sale and purchase agreements with essentially dedicated fleets and terminals and each party having a thorough understanding of the particular ship/shore interface, which resulted in a safe and reliable operation.

The considerable growth of the LNG short-term and spot cargo markets has resulted in the requirement to ensure that the ship/shore interface issues are standardized and well understood to ensure the continuing safe transportation of LNG.

It is necessary that each LNG port facility and terminal have its own specific safety and operational systems and that LNG carriers using the facility comply with these systems. For all vessels, it is necessary to take particular care to ensure that the basic requirements laid down in this International Standard are understood and applied at each cargo transfer in order to ensure the safe, secure and efficient transfer of cargo between ship and shore or vice versa.

This International Standard relates to marine operations during the vessel's port transit and the transfer of cargo at the ship/shore interface taking into account the publications of the International Maritime Organization (IMO), the Society of International Gas Tankers and Terminal Operators (SIGTTO), the International Group of Liquefied Natural Gas Importers (GIIGNL) and the Oil Companies International Marine Forum (OCIMF). Relevant publications by these and other organizations are listed in the Bibliography.

It is not necessary that the provisions of this International Standard be applied retrospectively and it is recognized that national and/or local laws and regulations take precedence where they are in conflict with this International Standard.

Petroleum and natural gas industries — Installation and equipment for liquefied natural gas — Ship-to-shore interface and port operations

1 Scope

This International Standard specifies the requirements for ship, terminal and port service providers to ensure the safe transit of an liquefied natural gas carrier (LNGC) through the port area and the safe and efficient transfer of its cargo. It is applicable to

a) pilotage and vessel traffic services (VTS);

b) tug and mooring boat operators;

c) terminal operators;

d) ship operators;

e) suppliers of bunkers, lubricants and stores and other providers of services whilst the LNG carrier is moored alongside the terminal.

This International Standard includes provisions for

— a ship's safe transit, berthing, mooring and unberthing at the jetty;

— cargo transfer;

— access from jetty to ship;

— operational communications between ship and shore;

— all instrumentation, data and electrical connections used across the interface, including OPS (cold ironing), where applicable;

— the liquid nitrogen connection (where fitted);

— ballast water considerations.

This International Standard applies only to conventional onshore liquefied natural gas (LNG) terminals and to the handling of LNGC's in international trade. However, it can provide guidance for offshore and coastal operations.