PD CEN ISO/TS 16530-2:2015

BSI Standards Publication

Well integrity

Part 2: Well integrity for the operational phase

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National foreword

This Published Document is the UK implementation of CEN ISO/TS 16530-2:2015. It is identical to ISO/TS 16530-2:2014.

The UK participation in its preparation was entrusted by Technical Committee PSE/17, Materials and equipment for petroleum, petrochemical and natural gas industries, to Panel PSE/17/-/4, Drilling and production equipment for petroleum and natural gas industries.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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English Version

Well integrity - Part 2: Well integrity for the operational phase (ISO/TS 16530-2:2014)

Intégrité du puits - Partie 2: Intégrité du puits pour la phase opérationnelle (ISO/TS 16530-2:2014)

Bohrungsintegrität - Teil 2: Bohrungsintegrität für die Betriebsphase (ISO/TS 16530-2:2014)

This Technical Specification (CEN/TS) was approved by CEN on 28 March 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.

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

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European foreword

The text of ISO/TS 16530-2:2014 has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries" of the International Organization for Standardization (ISO) and has been taken over as CEN ISO/TS 16530-2:2015 by 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.

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Endorsement notice

The text of ISO/TS 16530-2:2014 has been approved by CEN as CEN ISO/TS 16530-2:2015 without any modification.

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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 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*, Subcommittee SC 4, *Drilling and production equipment.*

ISO/TS 16530 consists of the following parts, under the general title *Well integrity*:

— *Part 2: Well integrity for the operational phase*

The following parts are under preparation:

— *Part 1: Life cycle governance manual*

Introduction

This Technical Specification has been developed by producing operating companies for oil and gas, and is intended for use in the petroleum and natural gas industry worldwide. This Technical Specification is intended to give requirements and information to the Well Operator on managing well integrity for the operational phase. Furthermore, this Technical Specification addresses the minimum compliance requirements for the Well Operator, in order to claim conformity with this Technical Specification.

It is necessary that users of this Technical Specification are aware that requirements above those outlined in this Technical Specification can be needed for individual applications. This Technical Specification is not intended to inhibit or replace legal requirements; it is in addition to the legal requirements; where there is a conflict the legal requirement always takes precedence. This can be particularly applicable where there is innovative or developing technology, with changes in field or well design operating philosophy.

This Technical Specification addresses the process of managing well integrity by assuring compliance to the specified operating limits for identified well types, that are defined based on exposure of risk to people, environment, assets and reputation, supported by associated well maintenance/monitoring plans, technical reviews and management of change.

The following terminology is used in this Technical Specification.

a) The term “shall” or “must” denotes a minimum requirement in order to conform to this Technical Specification.

b) The term “should” denotes a recommendation or that which is advised but not required in order to conform to this Technical Specification.

c) The term “may” is used to indicate a course of action permissible within the limits of the document.

d) The term “consider” is used to indicate a suggestion or to advise.

e) The term “can” is used to express possibility or capability.

Well integrity —

Part 2:
Well integrity for the operational phase

IMPORTANT — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.

1 Scope

This Technical Specification provides requirements and methods to the oil and gas industry to manage well integrity during the well operational phase.

The operational phase is considered to extend from handover of the well after construction, to handover prior to abandonment. This represents only the period during the life cycle of the well when it is being operated and is illustrated in Figure 1.

The scope of the Technical Specification includes:

— A description of the processes required to assess and manage risk within a defined framework. The risk assessment process also applies when deviating from this Technical Specification.

— The process of managing well integrity by operating wells in compliance with operating limits for all well types that are defined based on exposure of risk to people, environment, assets and reputation. The management of well integrity is supported by associated maintenance/monitoring plans, technical reviews and the management of change.

— The assessment of existing assets (wells / fields) in order to start the process of Well Integrity Management in accordance with this technical specification.

— The handover process required when changing from one activity to another during the operational phase.

The scope of the Technical Specification applies to all wells that are utilized by the oil and gas industry, regardless of their age, type or location.

The scope of the Technical Specification does NOT apply to:

— The periods during well intervention or work-over activities but it DOES include the result of the intervention and any impact that this can have to the well envelope and the associated well barriers.

— The equipment that is required or used outside the well envelope for a well intervention such as wire-line or coiled tubing or a pumping package.