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Petroleum and natural gas industries — Well integrity —

Part 1: Life cycle governance

Pétrole et industries du gaz naturel — Intégrité du puits —

Partie 1: Gouvernance du cycle de vie

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Foreword

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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 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 the following URL: 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 4, *Drilling and production equipment*.

A list of all parts in the ISO 16530 series can be found on the ISO website.

Introduction

This document has been developed by oil and gas producing operating companies and is intended for use in the petroleum and natural gas industries worldwide. This document is intended to provide guidance to the well operator on managing well integrity throughout the well life cycle. Furthermore, this document addresses the minimum compliance requirements for the well operator in order to claim conformity with this document.

It is necessary that users of this document are aware that requirements over and above those outlined herein may be needed for individual applications.

This document addresses the process of managing well integrity during each of the well life cycle phases, namely: basis of design; design; construction; operation; intervention (including work-over) and abandonment.

The following terminology, in line with ISO/IEC Directives, is used in this document:

a) The term “shall” denotes a minimum requirement in order to conform to this document.

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

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

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

In addition, the term “consider” is used to indicate a suggestion or to advise.

The phases of a well life cycle have separate and distinct requirements for achieving well integrity management objectives, but all phases have common elements and techniques. Clause 5 discusses these common elements and techniques. Clauses 6 to 11 discuss each individual phase and its requirements. Additionally, each clause highlights the aspects to be considered within the common elements and techniques as applicable to that phase.

Figure 1 summarizes the elements which are common among phases, and the relation between the phases.

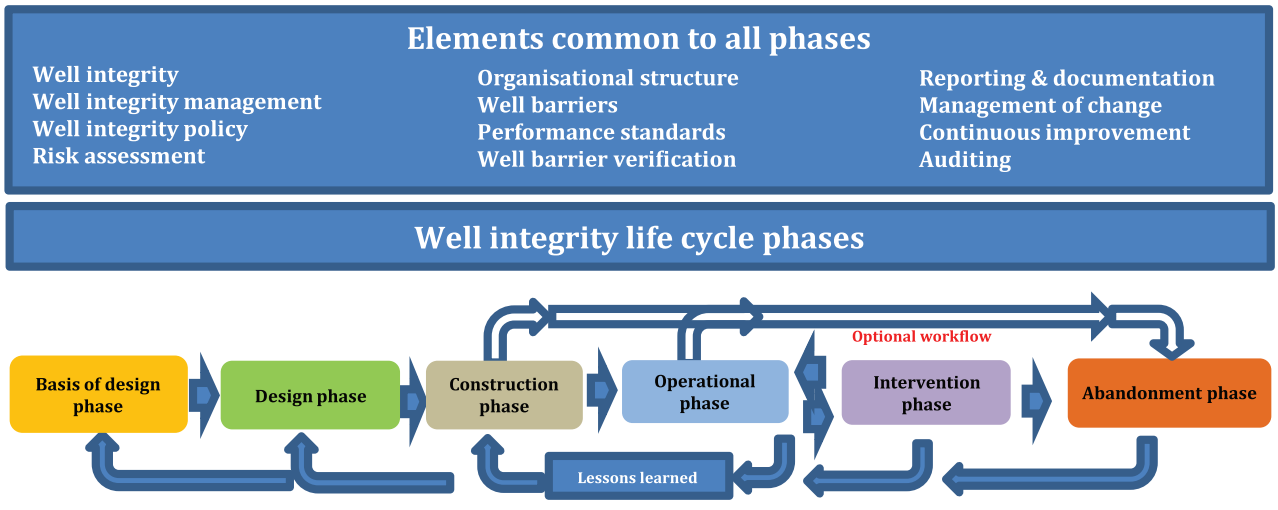

Figure 1 — Elements common to the phases of well integrity management