TECHNICAL SPECIFICATION

ISO/TS 29001

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Petroleum, petrochemical and natural gas industries — Sector-specific quality management systems — Requirements for product and service supply organizations

Industries du pétrole, de la pétrochimie et du gaz naturel — Systèmes de management de la qualité spécifiques au secteur — Exigences pour les organismes de fourniture de produits et services

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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.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

— an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;

— an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

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An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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.

ISO/TS 29001 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, and approved for publication as an ISO Technical Specification by ISO/TC 67 to provide additional requirements to ISO 9001:2000 specifically intended for the petroleum, petrochemical and natural gas industries.

This second edition cancels and replaces the first edition (ISO/TS 29001:2003), which has been technically revised.

This edition of ISO/TS 29001 includes substantive revisions to the following clauses:

1.1.1. Field of application – Supplemental

1.2.1. Allowable exclusions – Supplemental

3.1.2 Acceptance inspection (definition)

3.1.9 Field nonconformity (definition)

4.1.1 Outsourced processes and/or services – Supplemental

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7.1.1 Planning of product realization – Supplemental

7.3.3.1 Design and development output – Supplemental

7.4.3.1 Verification of purchased product – Supplemental

7.5.2.1 Validation of processes for production and service provision – Supplemental

8.2.2.2 Response times – Supplemental

8.2.4.2 Acceptance inspection – Supplemental

8.3.1. Acceptance of non-conforming product – Supplemental

8.3.4 Customer notification – Supplemental

8.5.2.2 Response times – Supplemental

The third edition of ISO 9001 cancelled and replaced the second edition (ISO 9001:1994) together with ISO 9002:1994 and ISO 9003:1994, which have been technically revised. Those organizations that have used ISO 9002:1994 and ISO 9003:1994 in the past may use the third edition of ISO 9001 by excluding certain requirements in accordance with 1.2.

The title of ISO 9001 was revised in the third edition and no longer includes the term “Quality Assurance”. This reflects the fact that the quality management system requirements specified in the third edition of ISO 9001, in addition to quality assurance of a product, also aim to enhance customer satisfaction.

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Introduction

0.1 General

ISO 9001:2000, Quality management systems — Requirements

Introduction

0.1 General

The adoption of a quality management system should be a strategic decision of an organization. The design and implementation of an organization's quality management system is influenced by varying needs, particular objectives, the products provided, the processes employed and the size and structure of the organization. It is not the intent of this International Standard to imply uniformity in the structure of quality management systems or uniformity of documentation.

The quality management system requirements specified in this International Standard are complementary to requirements for products. Information marked “NOTE” is for guidance in understanding or clarifying the associated requirement.

This International Standard can be used by internal and external parties, including certification bodies, to assess the organization's ability to meet customer, regulatory and the organization's own requirements.

The quality management principles stated in ISO 9000 and ISO 9004 have been taken into consideration during the development of this International Standard.

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NOTE This Technical Specification does not address competitive or commercial matters such as price, warranties, guarantees or clauses intended to sustain commercial objectives.

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0.2 Process approach

ISO 9001:2000, Quality management systems — Requirements

0.2 Process approach

This International Standard promotes the adoption of a process approach when developing, implementing and improving the effectiveness of a quality management system, to enhance customer satisfaction by meeting customer requirements.

For an organization to function effectively, it has to identify and manage numerous linked activities. An activity using resources, and managed in order to enable the transformation of inputs into outputs, can be considered as a process. Often the output from one process directly forms the input to the next.

The application of a system of processes within an organization, together with the identification and interactions of these processes, and their management, can be referred to as the "process approach".

An advantage of the process approach is the ongoing control that it provides over the linkage between the individual processes within the system of processes, as well as over their combination and interaction.

When used within a quality management system, such an approach emphasizes the importance of

a) understanding and meeting requirements,

b) the need to consider processes in terms of added value,

c) obtaining results of process performance and effectiveness, and

d) continual improvement of processes based on objective measurement.

The model of a process-based quality management system shown in Figure 1 illustrates the process linkages presented in clauses 4 to 8. This illustration shows that customers play a significant role in defining requirements as inputs. Monitoring of customer satisfaction requires the evaluation of information relating to customer perception as to whether the organization has met the customer requirements. The model shown in Figure 1 covers all the requirements of this International Standard, but does not show processes at a detailed level.

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NOTE In addition, the methodology known as "Plan-Do-Check-Act" (PDCA) can be applied to all processes. PDCA can be briefly described as follows.

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Plan: establish the objectives and processes necessary to deliver results in accordance with customer requirements and the organization's policies.

Do: implement the processes.

Check: monitor and measure processes and product against policies, objectives and requirements for the product and report the results.

Act: take actions to continually improve process performance.

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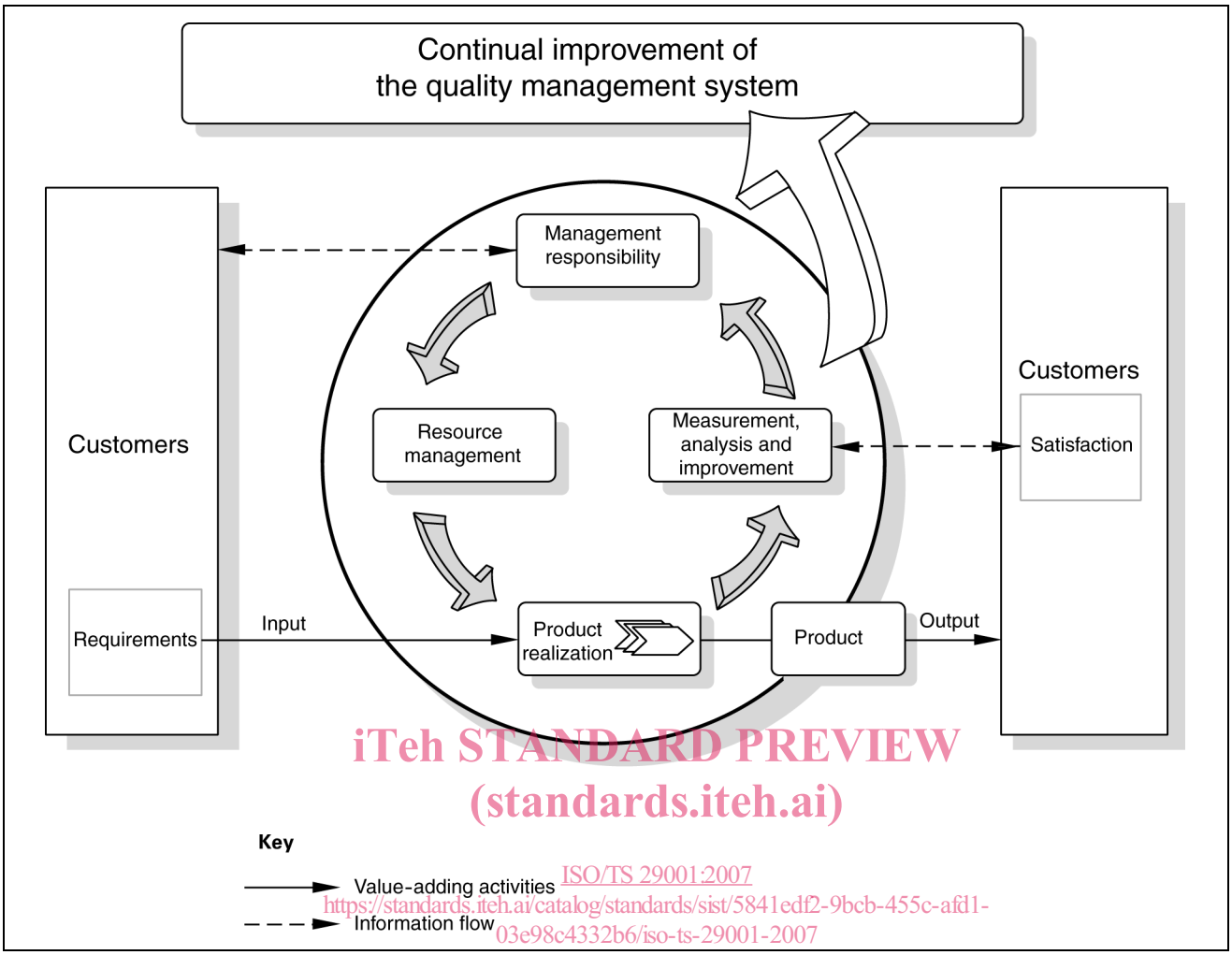

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Figure 1 — Model of process-based quality management system

0.3 Relationship with ISO 9004

ISO 9001:2000, Quality management systems — Requirements

0.3 Relationship with ISO 9004

The present editions of ISO 9001 and ISO 9004 have been developed as a consistent pair of quality management system standards which have been designed to complement each other, but can also be used independently. Although the two International Standards have different scopes, they have similar structures in order to assist their application as a consistent pair.

ISO 9001 specifies requirements for a quality management system that can be used for internal application by organizations, or for certification, or for contractual purposes. It focuses on the effectiveness of the quality management system in meeting customer requirements.

ISO 9004 gives guidance on a wider range of objectives of a quality management system than does ISO 9001, particularly for the continual improvement of an organization's overall performance and efficiency, as well as its effectiveness. ISO 9004 is recommended as a guide for organizations whose top management wishes to move beyond the requirements of ISO 9001, in pursuit of continual improvement of performance. However, it is not intended for certification or for contractual purposes.

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0.4 Compatibility with other management systems

ISO 9001:2000, Quality management systems — Requirements

0.4 Compatibility with other management systems

This International Standard has been aligned with ISO 14001:1996 in order to enhance the compatibility of the two standards for the benefit of the user community.

This International Standard does not include requirements specific to other management systems, such as those particular to environmental management, occupational health and safety management, financial management or risk management. However, this International Standard enables an organization to align or integrate its own quality management system with related management system requirements. It is possible for an organization to adapt its existing management system(s) in order to establish a quality management system that complies with the requirements of this International Standard.

0.5 Goal of this Technical Specification

The goal of this Technical Specification is the development of a quality management system that provides for continual improvement, emphasising defect prevention and the reduction of variation and waste in the supply chain and from service providers.

This Technical Specification, coupled with applicable customer-specific requirements, defines the fundamental quality management system requirements for those subscribing to this document.

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This Technical Specification is intended to avoid multiple certification audits and provide a common approach to a quality management system for the petroleum, petrochemical and natural gas industries.

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Petroleum, petrochemical and natural gas industries — Sector-specific quality management systems — Requirements for product and service supply organizations

1 Scope

1.1 General

ISO 9001:2000, Quality management systems — Requirements

Introduction

1.1 General

This International Standard specifies requirements for a quality management system where an organization

a) needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements, and

b) aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable regulatory requirements.

NOTE In this International Standard, the term "product" applies only to the product intended for, or required by, a customer.

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1.1.1 Field of Application — Supplemental

This Technical Specification defines the quality management system for product and service supply organizations for the petroleum, petrochemical and natural gas industries.

Boxed text is original ISO 9001:2000 text unaltered and in its entirety. The petroleum, petrochemical, and natural gas industry sector-specific supplemental requirements are outside the boxes.

1.2 Application

ISO 9001:2000, Quality management systems — Requirements

1.2 Application

All requirements of this International Standard are generic and are intended to be applicable to all organizations, regardless of type, size and product provided.

Where any requirement(s) of this International Standard cannot be applied due to the nature of an organization and its product, this can be considered for exclusion.

Where exclusions are made, claims of conformity to this International Standard are not acceptable unless these exclusions are limited to requirements within clause 7, and such exclusions do not affect the organization's ability, or responsibility, to provide product that meets customer and applicable regulatory requirements.

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