

D 19

QSE IMS readiness

Goal

1 Integrated system approach

- 1.1 Background
- 1.2 Common concepts
- 1.3 Principles, benefits and approach

2 Standards and definitions

- 2.1 Standards
- 2.2 Definitions

3 Process approach

- 3.1 Process
 - 3.1.1 Management process
 - 3.1.2 Realization process
 - 3.1.3 Support process
- 3.2 Process mapping
- 3.3 Process approach

4 Requirements

- 4.1 General requirements
- 4.2 Legal and other requirements
- 4.3 Documentation

5 Management responsibility

- 5.1 Commitments
- 5.2 Management review

6 Resource management

7 Product realization and implementation

- 7.1 Planning
- 7.2 Stakeholders
 - 7.2.1 Customers
 - 7.2.2 Communication
- 7.3 Design and development
- 7.4 Purchasing
- 7.5 Production and operational control
- 7.6 Monitoring and measuring
- 7.7 Emergency

8 Measurement, analysis and improvement

- 8.1 General
- 8.2 Internal audit
- 8.3 Nonconforming product, incident, accident
- 8.4 Analysis of data
- 8.5 Improvement
 - 8.5.1 Continual improvement
 - 8.5.2 Corrective action
 - 8.5.3 Preventive action

Annexes

Goal of the module: Readiness for implementation, certification, maintenance and improvement of your integrated Quality, Safety and environment management system so as to be able to:

- increase the satisfaction of stakeholders
- ensure workplace prevention and environmental protection
- demonstrate compliance with customer, legal and regulatory requirements

1 Integrated system approach

1.1 Background

In most cases an integrated management system has its origins in management systems related to:

- quality
- health and safety
- environment

The targets are different (product, personnel, environment), but complementary, as no company can do without one of three elements.

Quality (Q)

Quality is anything that can be improved. Masaaki Imai

The evolution of the quality concept and the standards of quality management systems in the industrial countries in the 20th century can be summarised as:

- quality control (till the 1980s) – quality practices, customers are (or seem) satisfied
- quality assurance (the 1990s) – the system is defined and implemented
- quality management (ISO 9000: 2000) – the system is controlled and its efficiency is improved

The technical committee "Management and quality assurance" (ISO/TC 176) within the ISO (International Organization for Standardization) was created in 1980. ISO itself was created in 1947. The ISO 9000 standards (see figure 1-1) have appeared in:

- 1987: ISO 9000 first edition: ISO 9001; ISO 9002; ISO 9003; ISO 9004
- 1994: ISO 9000 first revision: ISO 9001; ISO 9002; ISO 9003; ISO 9004 – more understandable, customer focus better defined, preventive actions added
- 2000: ISO 9000 second revision: ISO 9000; ISO 9001; ISO 9004 – simplified structure (8 clauses), priority to process approach and customer satisfaction
- 2008: third revision (fourth edition of ISO 9001): clarification of the requirements (no new requirement), better alignment with ISO 14 001

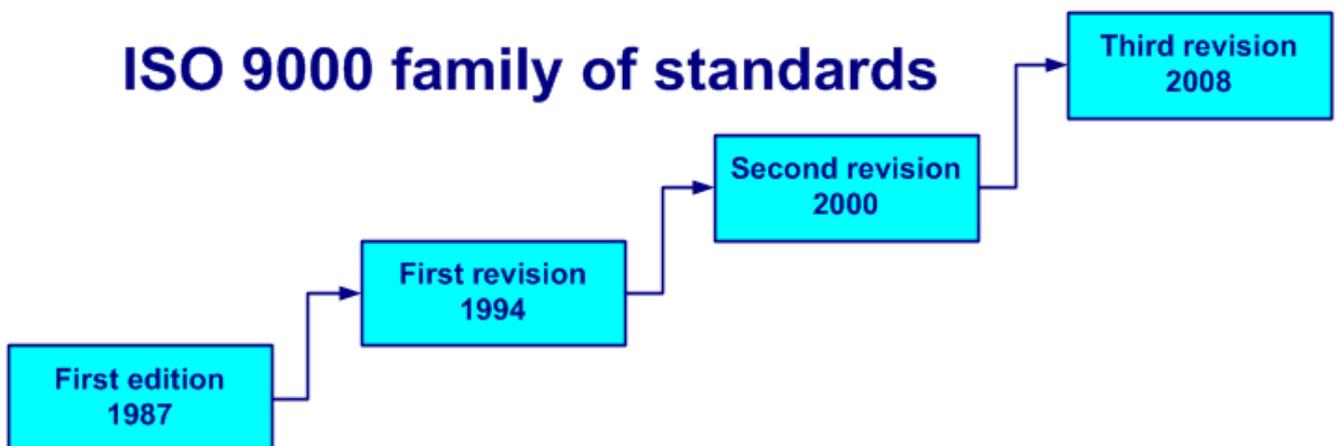


Figure 1-1. The first edition and revisions of ISO 9000

The new version of the ISO 9001 standard has been published in November 2008.

The ISO standards (more than 18 000) are used in countless fields and are recognized all over the world.

Health and safety (S)

The first laws relating to safety in France appear in the late nineteenth century.

The integration of occupational risk assessment (related to health and safety of workers) in the management of each company since 2001 is an obligation of the Labour Code (R4121-1).

The standard BS OHSAS 18001: 2007 is neither French nor an ISO standard but is most commonly used for certifying health and safety worldwide.

Environment (E)

The first laws on environmental protection have emerged in the 70s of last century.

The 2004 edition of ISO 14001 is different from the first version (1996) by:

- improved compatibility with ISO 9001
- greater clarity
- greater emphasis given to the continual improvement
- strengthening the evaluation of compliance (legal and regulatory)
- further simplification of documentation

1.2 Common concepts

The three quality, safety and environment (QSE) management systems (see figure 1-2) share the following concepts:

- stakeholders:
 - needs
 - expectations
 - requirements
 - risks
 - satisfaction
- PDCA approach
- process approach
- continual improvement
- commitments of management:
 - policy
 - objectives
 - planning
 - implementation
 - communication
 - resources
 - management review
- management responsibility
- corrective and preventive actions
- control of documents and records