

# ISO 9000:2000

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## What is ISO 9000:2000?

The International Organization for Standardization (ISO) was founded in 1946 “to develop a common set of manufacturing, common trade, and communications standards.” Based in Geneva, Switzerland, ISO is composed of more than 100 member nations that are represented by national organizations charged with creating standards (the US-based organization is called the American National Standards Institute).<sup>1</sup>

ISO 9000 was first published in 1987, revised in 1994, and updated in 2000; hence the name ISO 9000:2000, the latter number referring to the last revision. The main reasons for 2000 revision were to improve user-friendliness; to give more attention to the process approach, continual improvement, and resource management; and to improve integration of quality management systems with other management systems.

The ISO 9000 family is composed of the 9000 series of two documents, ISO 9001:2000, *Quality management systems—Requirements* and ISO 9004:2000, *Quality management systems—Guidelines for performance improvements*, which outline specific requirements; ISO 19011, *Guidelines for quality and/or environmental management systems auditing*; and ISO 9000:2000, *Quality management systems—Fundamentals and vocabulary*.<sup>2</sup>

ISO 9000:2000 is a set of general guidelines that organizations can adopt to improve their quality management systems; the guidelines are broad enough to apply to Fortune 500 companies as well as not-for-profit organizations. The guidelines are separated into eight quality management principles: (1) Customer Focus, (2) Leadership, (3) Involvement of People, (4) Process Approach, (5) Systems Approach to Management, (6) Continual Improvement, (7) Factual Approach to Decision Making, and (8) Mutually Beneficial Supplier Relationships.

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<sup>1</sup> Peach, Robert W., *The ISO 9000 Handbook 4<sup>th</sup> Edition*, QSU Publishing Company, 2003, p 15.

<sup>2</sup> Cianfrani, Charles A., Joseph J. Tsiakals, John E. (Jack) West, *The ASQ ISO 9000:2000 Handbook*, ASQ Quality Press, Milwaukee, 2002, p 17-18.

## **How to Use the Concept?**

In order to fully utilize the ISO 9000 family of principles, an organization must: (1) Understand why it should use ISO 9000, (2) How to implement ISO 9000, and (3) How to obtain certification.

## **Why ISO 9000?**

Many companies want to focus on continual process improvement in order to improve internal processes, decrease costs, and increase customer satisfaction and retention. “ISO 9001 is a vehicle to educate management about systems thinking, the process approach, and process improvement tools and techniques.”<sup>3</sup> The international acceptance of these standards makes them even more appealing to many businesses and organizations.

## **How to Implement ISO 9000?**

ISO 9000 implementation responsibilities rest on management, employees, and internal and external auditors. Management responsibilities can be summarized in ten basic points:

- Communicate importance of meeting customer requirements.
- Develop an integrated overall plan.
- Ensure that quality starts at design stage to prevent problems.
- Monitor process capability.
- Measure key product and service characteristics.
- Continually improve processes.
- Create constancy of purpose.
- Demonstrate leadership. Work on the system to support the employee.
- Commit to ongoing training.
- Promote continual improvement rather than management by numbers.<sup>4</sup>

Employee responsibilities include:

- Follow the most current work instruction.
- Identify problems and inaccuracies in work instructions and inform management.
- Make recommendations for process improvement.
- Identify and report to management all service or product nonconformity.

Auditors responsibilities include:

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<sup>3</sup> Scott, John, *ISO 9000 in Service: The Good, the Bad, And the Ugly*, Quality Progress, September 2005, Vol. 38, Issue 9, p 42-48.

<sup>4</sup> Reid, R. Dan, *From Deming to ISO 9000:2000*, Quality Progress, June 2001, vol 34, issue 6, p 66-70.

- Ensuring complete conformity to ISO standards.
- Monitor and review quality management system activity at appropriate intervals.
- Suggest corrective or preventive action as needed. (Scott)

### **How to Obtain Certification**

After management, employees, and internal auditors have adopted and ensured ISO quality standards, the organization can then contact a accredited registrar (an approved auditor) that can issue official certifications.

### **Palmetto GBA—A Working Example of ISO 9000 in Service**

Palmetto GBA, a Medicare and Medicaid claims processing contractor, has been focused on qualitative process improvement for 12 years. In 1998, The Centers for Medicare and Medicaid Services, one of Palmetto's largest customers began requiring ISO 9001 certification for its business contracts. Palmetto decided to become 9001 certified to retain and satisfy its largest customers. Palmetto implemented a 4-phase program in order to comply with customer demands.

In the planning phase Palmetto read and understood the ISO 9001 standard and attended proper training. After receiving the training they were able to implement the second phase by performing GAP analysis between their existing system and the new Quality Management System. They identified problems in their current business processes by creating a flowchart of the sequence and interaction of all business processes, which allowed Palmetto to implement the third phase by analyzing problems and implementing new procedures. In the fourth and final phase Palmetto hired two certified auditors to audit processes full-time. They continually provided new ideas on improving quality management systems.

Palmetto gave a great example of qualitative improvements by utilizing ISO 9001 standards. Examples of quantitative improvements are evident with DuPont. DuPont used ISO 9000 to "increase on-time delivery from 70 percent to 90 percent, decreasing

cycle time from 15 days to 1.5 days, increasing first-pass yields from 72 percent to 92 percent, and reducing the number of test procedures to one-third.”<sup>5</sup>

## **Conclusion**

The family of ISO 9000 including specifics found within 9001 and 9004 provide a way for companies to improve their business processes in order to accomplish the ultimate goal of pleasing their customers.

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<sup>5</sup> Evans, James R., William M. Lindsay, *The Management and Control of Quality, Sixth Edition*. Thompson Southwestern, 2005, p 132

## Works Cited and Additional Sources

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Institute of Quality Assurance (IQA) – <http://www.iqa.org>

International Organization for Standardization – <http://www.iso.ch>

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