

## STUDY ON THE EVOLUTION OF THE CURRENT ISO CERTIFICATIONS IN ROMANIA

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### Abstract

*To increase the efficiency and effectiveness of processes within an organization, ISO standards can help both large enterprises and small companies (SMEs), both in industrialized and in developing countries offering solutions and bringing considerable advantages in almost all existing fields. ISO certification brings a set of measures in the areas of an organization, be it about quality, environmental safety, food or protection and safety of personnel, this certification brings benefits both in the current processes and more importantly, the future development plans. In this paper, graphs showing the distributions of increasing certification, demonstrate that more and more companies in Romania have realized that, only implementing and certifying ISO standards, they will be successful in domestic and international market in terms of competition, in particular against European companies.*

**Key words:** standards, management systems, ISO certification, quality, customer satisfaction

### 1. Introduction

Even if the EU does not require ISO certification to the organizations in European countries, however, this certification has become almost a prerequisite and assures the quality of products or services offered by the company. Ioan Abrudan (2008) suggests that the issue of quality management "is a kind of border that divides the world into two: those that matter and those that don't matter, development and underdevelopment, planning and improvisation, order and anarchy". Therefore, this certification should be a management action in the idea of increasing competitiveness and strengthening the organization's competence in the market, especially in these times of global crisis.

Some businesses establish a management system because they are convinced that in this way they will be successful both nationally and internationally, but mostly because they hope that the company will work methodically and organized. However there are other businesses that implement these systems because they will have a good image on the market, or because the competition have it too, and others because it is required by their customers or legislation. These kinds of ideas should be removed and people should understand that no work can be done without an ISO

standard and also the companies should find the resources for implementation and certification.

ISO (International Organization for Standardization) is the largest publisher of standards and its official website [10], rightly, states that "standards make a huge and positive contribution to most aspects of our lives". As a result of the efforts of ISO, more and more companies implement Quality Management System (ISO 9001), Occupational Health and Safety Management System (OHSAS 18001), Environmental Management System (ISO 14001), Food Safety Management System (ISO 22000), with trends towards integrated management systems.

### 2. Evolution of ISO certifications in recent years and benefits

Each year the ISO organization publishes a study that shows the number of certifications issued by accredited certification bodies for management standards - quality, environmental, information security, food safety and medical devices. Inquiries made by ISO emphasize the importance of standards worldwide, the data being collected from 178 countries. ISO member countries comprise 98% of the world economy and represent 97% of the world population which is affected by these standards.

If we follow the results presented last year (2012) by ISO, shown in Table 1, we see an overall increase in the number of certificates in 2011 compared to 2010 with a total of 17607 certificates, or 1%.

Table 1: Worldwide total of ISO certificates

Name of standard	Number of certificates in 2011	Number of certificates in 2010	Evolution	Evolution in %
ISO 9001	1111698	1118510	-6812	-1%
ISO 14001	267457	251548	15909	6%
ISO 50001	461	0		
ISO/IEC 27001	17509	15626	1883	12%
ISO 22000	19980	18580	1400	8%
ISO/TS 16949	47512	43946	3566	8%
ISO 13485	20034	18834	1200	6%
<b>TOTAL</b>	<b>1484651</b>	<b>1467044</b>	<b>17607</b>	<b>1%</b>

To be observed as well:

- significant increases in the number of ISO/IEC 27001 certifications for information security, 12%, and ISO 22000 food safety management and ISO/TS 16949 quality management standard for the automotive sector, 8%;
- increases, but at a lower percentage, 6%, of ISO 14001 environmental management certifications and ISO 13485 which contains the operation requirements of a quality management system for medical devices;
- a slight decrease by 1% from the ISO 9001 (fig. 1) attributed to the fact that they are currently working on the revision of these standards to be published in 2015.

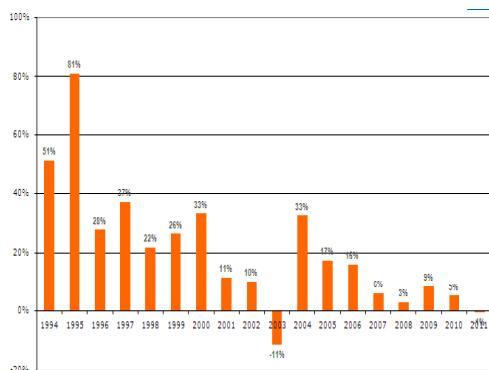


Fig. 1: The evolution of ISO 9001

In the present day no one doubts the benefits of ISO standards. Concerning standardizing, Bogdan Rusu (Rusu, 2002) suggests that “by standardizing activities a framework can be created, on which we can develop continuous improvement process. Thus, as more efficient and effective working methods and procedures arise, they will be standardized and will replace existing procedures”.

In a recent book ISO [11], published in English and French, entitled "10 Good Things for SMEs", small business executives in 10 countries around the world explains how ISO standards contribute to their success. Here is what emerges from their points of

view, following their experience, about the good things ISO standards bring to SMEs:

- help them to compete with larger companies in the same positions;
- open export markets for the products and services they offer;
- help them discover the best business practices;
- boosts business operation efficiency;
- adds credibility in the eyes of SMEs clients;
- provide new business opportunities and sales;
- give a competitive advantage;
- makes the brand name internationally recognized;
- helps the growth of the company;
- enable a common language that is used in the entire industry.

### 3. ISO certifications in Romania

In recent years, in Romania there is an increase of concern dedicated by organizations regarding different management systems certification. A record of how the development of certification of organizations evolved in the past years in Romania is shown in table 2.

Table 2: The evolution of ISO certifications in Romania

	2007	2008	2009	2010	2011
<b>ISO 9001</b>	9633	10737	15865	16200	19405
<b>ISO 14001</b>	2269	3884	6863	7418	9557
<b>ISO/TS 16949</b>	155	181	194	209	217
<b>ISO/TS 13485</b>	9	8	28	56	108
<b>ISO/IEC 27001</b>	16	44	303	350	760
<b>ISO 22000</b>	276	347	661	641	1100
<b>ISO 50001</b>					65

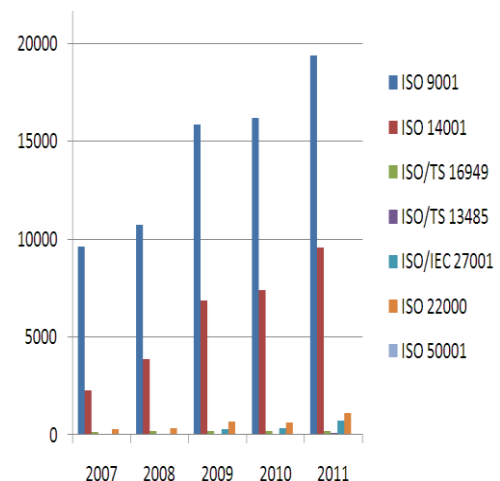


Fig. 2: The chart of the evolution

From the chart we can see that:

- the number of ISO 9001 certificates issued increased from 16200 in 2010 to 19405 in 2011, meaning an increase of 3205 (fig. 3), that is an increase of 19%, which put Romania in the 3<sup>rd</sup> position in the world and 2<sup>nd</sup> in Europe.

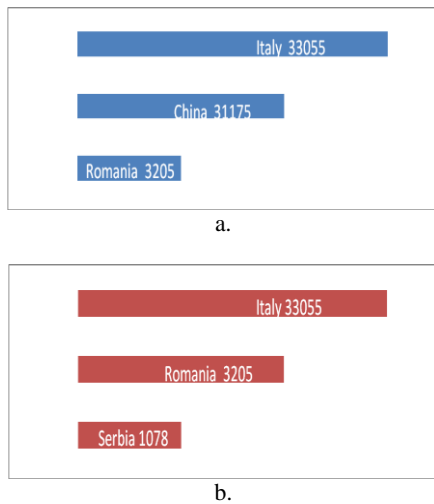


Fig. 3: Top 3 countries for ISO 9001 growth  
a - worldwide; b - Europe

ISO 9001 is a set of minimum requirements for quality management in an organization, in terms of external, the word "must" present in all requirements of the standard, the quality management system is basically oriented and directed to the customer's level of confidence. Liviu Moldovan, (Moldovan 2000, p. 21) states „that it is absolutely necessary for companies in developing countries to implement quality systems based on this standard to allow penetration of the highly competitive export markets.”

- for ISO/IEC 27001 the number of issued certificates increased from 350 issued in 2010 to 760 in 2011, an increase of 410 (fig. 4), that represents 117 %, placing Romania in the 2<sup>nd</sup> position in the world and first in Europe.

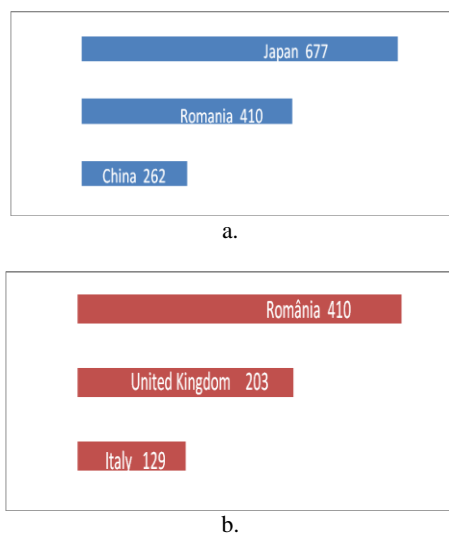


Fig. 4: Top 3 countries for ISO / IEC 27001 growth

- for ISO 22000 certificates, the increase from 641 certificates issued in 2010 to 1100 in 2011, indicates an increase of 459 (72 %), placing Romania in the 2<sup>nd</sup> position in Europe and 3<sup>rd</sup> in the world (fig. 5).

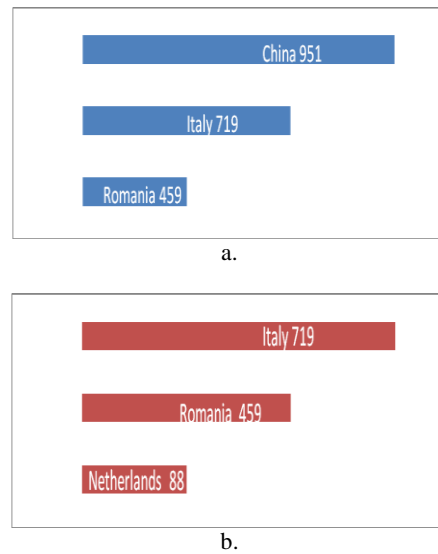


Fig. 5: Top 3 countries for ISO 22000 growth  
a - worldwide; b - Europe

- for ISO 50001, Romania with 65 certificates (fig. 6), ranks 2<sup>nd</sup> in Europe.

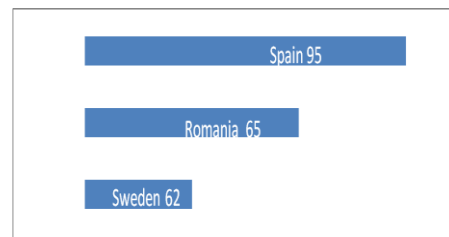


Fig. 6: Top certificates worldwide - ISO 50001

It can be concluded that in Romania, where labour is cheaper but well qualified, there is a strong demand for ISO certification, so that the companies can increase their competitiveness for a better positioning on domestic and especially foreign markets. For example, ISO/TS 16949, ISO 14001 and OHSAS 18001 certification of Frauenthal Automotive company in Sibiu, was a guarantee of quality management and of the delivered products. It is the only European plant that has as clients all major heavy truck manufacturers: IVECO, Daimler, MAN, Volvo, Renault, Scania, and DAF.

These results come as a confirmation of the allegations of Marieta Olaru (2000): "the structure of standards, particularly emphasize the integration of processes that involve the customer with the activities within the organization and continuous improvement of all processes, according to the PDCA Cycle: Plan-Do-Check-Act."

#### 4. Trends towards Integrated Management Systems

Currently, in Romania, like worldwide, in order to increase efficiency and effectiveness of processes, organizations direct their efforts in the implementation and certification of integrated management systems (IMS):

- Integrated Management System for Quality & Environmental (ISO 9001 - ISO 14001)
- Integrated Management System for Quality & Occupational Health and Safety (ISO 9001 - OHSAS 18001)
- Integrated Management System for Environmental & Occupational Health and Safety (ISO 14001 - OHSAS 18001)
- Integrated Management System for Quality & Environmental & Occupational Health and Safety (ISO 9001 - ISO 14001 - OHSAS 18001).

These integrated systems can be applied to companies of different sizes and from different fields of activity, seeking to become competitive in the national and international market. With their advantages, as Suditu suggests (Suditu 2007), these systems considered to be superior to individual management systems:

- reduce the costs of implementation and certification of management systems
- provide a positive image of the organization
- allow coherent activities planning of the organization, taking into consideration the aspects of quality, environment, health and safety.

Typically, the policy of integrated systems includes or refers to the principles that promote the organization's management. Reference [6] describe these principles, e.g.:

- integrated management is a top priority for the organization;
- applying the principles of sustainable development by meeting the needs of the present;
- ongoing assessment of the performance of the organization.

An example of successful implementation of SMI, in Romania, would be company POPECI UTILAJ GREU S.A Craiova, whose areas of activity include designing, manufacturing and servicing of heavy machineries and complex equipments for power industry, metallurgy, mining, wood and paper, and metal fabrication and packaging. Reference [13] shows that IMS implementation within the company involved using the latest "environmentally friendly" equipment, employing qualified personnel specialized in all types of processes, including the staff in the quality assurance department, adopting new policies that contribute to customer satisfaction, and to the development of the company.

#### 5. Conclusions

Thereby, the benefit of the client is that, standardization allows for the highest quality products, sustainable and at a competitive price. The concept of quality created the management system.

The question: What will happen next? and the answer can be found in "excellence" and "performance".

In this context, Michael BERINDE said, at National Conference on standardization [12], that standardization is an area where proactive involvement and long-term vision can bring benefits both immediate and sustainable benefits for the companies. As a conclusion, my work shows that Romania understood this thing so Romanian companies will continue to embrace the use standards.

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