

Methodology, principles and approaches of management systems integration

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Introduction

The rules of market relations under the conditions of the globalization of the world economics require that the modern business should strive for constant balance between maximum possible satisfaction of the needs of all interested parties (shareholders, investors, consumers, bodies of state administration, society), competitive pressure and complete law and field requirements observance. Achieving and maintaining such a balance ensures to enterprises prospects of stable and successful development, and in many cases they are a corporate aim. For its achievement the top management applies strategic programs including programs that are aimed at introducing standardized requirements for design, maintenance and development of formalized internationally-recognized management systems. The latter are considered as real and effective tools for increasing profits and broadening options of the organization through system risk management and continual improvement. As a result of it all parties interested in activity of the organization, have the right to expect:

- a) Product competitive recovery
- b) Cost reduction
- c) Increase of profit, profitability, current assets and return on investment
- d) Easing of environmental impact
- e) Reduction of professional risks and effects of on-site accidents
- f) Ensuring social safety of personnel

At present most of the organizations are at different stages of implementation, certification and further development of management systems in accordance with the requirements of various standards and/or specifications, such as: ISO 9001, ISO 14001, OHSAS 18001, ISO/TS 16949, ISO 22000, ISO/IEC 27001, ISO/IEC 20000 and etc. For instance, in Russia and CIS countries during the past 10 years there is a steady growth of organizations that work in this direction.

A distinctive feature for the most of those organizations is their endeavor to implement at once or gradually several models of management systems at the enterprise. As the most typical example we can consider the practice of designing a quality management system (QMS) based on ISO 9001 requirements, environmental

management system (EMS) based on ISO 14001 requirements and/or occupational health and safety management system (OHSAS) based on OHSAS 18001 requirements.

These systems often function as independent autonomous models that are focusing on satisfaction of demands of different interested parties, e.g.:

1. Quality management system (ISO 9001) firstly should meet the interests of the organization's customers by means of satisfaction of their demands

2. Environmental management system (ISO 14001) should meet the interests of the society integrally by means of minimization of negative impact on the environment because of production activity of the organization

3. Occupational health and safety management system (OHSAS 18001) should meet the interests of the organization's personnel by means of minimization of risks as pertaining to occupational safety

However, the practice irrefutably testifies to the fact that simultaneous functioning of several autonomous systems is usually fraught with a number of problems:

a) Doubling of separate requirements gives rise to implementation of several procedures similar in objectives (e.g.: document and record control procedures, procedures of internal audit, etc.)

b) A conflict of priority in requirements of various management systems (e.g.: status and role of management representatives in quality and environmental safety; resources for quality assurance and realization of environmental programs, and so on)

c) Lack of a uniform effective mechanism or the availability of several ones at the same time but mismatching to each other, mechanisms of response to destabilizing factors of outside and inside environment of the organization

As a consequence, the problems above-mentioned inevitably lead to proneness to conflict between various management systems, accompanied by decrease of business controllability, rejection of management system document requirements by personnel, and give birth to effect "circular firing squad" that badly affects effectiveness of such management systems functioning.

Then, in fact, almost every ISO standard has common elements, which are reasonably to be controlled by a unified method, using an integrated approach. This circumstance justifies wishes for uniting these systems into a single integrated management system (IMS) with more or less integration level. The accumulative effect of the integration of common requirements for an organization's management system enables to operate these management systems with maximum effect.

It often happens that the term “management systems integration” is understood by mistake as a mechanical combination of requirements of various standards for management systems which are implemented by the organization. Thereby the necessity for creating a **common** mechanism that enables to achieve the aim of the organization through fulfillment of the requirements of the applicable standards for management systems is ignored.

At the same time the philosophy of the modern management outlines three main aspects which assure stable development of business of any organization:

1. Conformity of activity results (such as: products, environmental impact and personnel) with demands of interested parties and applicable legislative and field requirements

2. Risk management at implementation of its strategy and achievement of the objectives defined

3. Integration of all processes, implemented in the organization, into a uniform consolidated system that is represented as integral mechanism of the management of the organization

Therefore, the basic reasons for integration of management systems include:

- a) Attainment of conformity with all applicable requirements
- b) Organization’s risk management
- c) Improvement of organization’s image
- d) Reduction of non-production-related costs
- e) Improvement of cooperation with regulatory, legislative and supervisory bodies
- f) Reduction of abuse of environment
- g) Decrease of probability for origin of incidents and accidents
- h) Improvement of labor and safety conditions at the workplace
- i) Requirements of shareholders and investors

The integrated management system (IMS) comprises the whole set of at least two management systems that meet the requirements of at least two management system standards, focused on different interested parties and functioning in the organization as integration.

IMS assures considerable consistency of actions within the organization, thus intensifying the synergetic effect, meaning that the common result of concerted actions is more than a simple scope of separate results. In general it looks as follows:

1) IMS minimizes functional disunity of the personnel that occurs when designing autonomous management systems

2) The creation of an integrated system is usually far less labor-intensive than the creation of several parallel systems. The costs for the development, the operation and the certification of an integrated system are lower than the total costs of having several management systems in place

3) IMS better take into account the balance of interests of the organization's third parties rather than simultaneously functioning systems

4) The achievement of greater "transparency" and manageability as a number of internal and external connections in an integrated system is lower than the total number of those connections in several systems

5) The scope of documents in an integrated system is considerably decreasing compared to the scope of documents in several parallel systems. With an integrated system, a higher level of involvement of the personnel in the improvement of the organization's activity is achieved

6) The effectiveness of the united management system is increasing due to using joint actions in the integrated system such as determination of policy, planning, personnel training and so on. Greater attention is paid to general aims of business

7) The integration contributes to reduction of proneness to conflict and probable contradictions between quality-related, ecology-related and safety-related issues, more integral approach to profitability increase, more efficient use of resources, improvement of the eurhythmy of the communication process and the exclusion of process doubling. Transition to risk management is becoming urgent and indispensable.

Suchwise, the integration of management systems may lead to main advantages for business as follows:

- 1) Better planning and increased efficiency of activity
- 2) Assurance of integral approach to risk management
- 3) Low level of proneness to conflict between systems
- 4) Reduction of doubling and bureaucracy
- 5) Higher effectiveness and efficiency of internal and external audits
- 6) Using of long-term opportunities for improvement
- 7) Economy of resources
- 8) Improved relations with interested parties
- 9) Improving information for decision making
- 10) Growth of goodwill and founders' support

Currently, there is a lack of an international standard defining general requirements, guidelines and approaches to establishment of IMS and forming a single structure for the

integration of management systems. This fact leads to that integration of management systems is often of formal nature and does not bring expected results and profits.

It is necessary to mention that most of the publications, presented both in native and foreign literature, describe elements of the methodology for establishing integrated management systems, based only on three standards (ISO 9001:2000, ISO 14001:2004, OHSAS 18001:2007), that constrain for using these publications. The most comprehensive and science-based publications in the foreign literature are:

1) Publicly accessible specifications, designed by the British Standard Institute (BSI) PAS 99:2006. "Specification of common management system requirements as a framework for integration";

2) United standard of Australia and New Zealand AS/NZS 4581:1999. "Management system integration – Guidance to business, government and community organizations".

In addition, it is necessary to mention that PAS 99:2006 contains unified requirements for the integration of management systems without manifestation of these requirements within the context of general approaches and principles of establishment of IMS. In turn, AS/NZS 4581:1999 contains guidelines for application of some elements and principles of integration of management systems within the contest of only three standards (ISO 9001:2000, ISO 14001:2004, OHSAS 18001:2007) without their consideration in terms of practice.

In 2008 the Certification Association "Russian Register" has issued the paper intended for integration of management systems. This work has a unified model with requirements for IMS made on the basis of best native and foreign practice, including practice of leading specialists of Certification Association "Russian Register"¹.

¹ Manual for integration of management systems / D.A. Martsynkovskiy, A.V. Vladimirtsev, O.A. Martsynkovskiy; Certification Association "Russian Register" – St.- Petersburg: 2008.