

## FOCUS ON THE SME MANAGEMENT OPTIMIZATION IN LITHUANIA: IMS - FOR IMAGE OR FOR EFFECTIVENESS?

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### **Abstract**

*The goal of the paper is to identify the main drivers to the integrated management system (IMS) in small and medium size enterprises (SME) in Lithuania. For the survey, methods of the research were used: a meta-analysis, an analysis of statistical data, CEOs interviewing. Representatives from 124 enterprises were interviewed.*

*Generalizing research findings, it could be pointed out that SME in Lithuania are successfully implementing IMS into their practice. The biggest benefit IMS gives in fields of documentation management of standards being realized, quality management standard realization, environment protection, organization's image boosting and increase of competitiveness. The largest obstacle for a successful IMS realization is a lack of employees' motivation to behave in a new way when IMS is implemented. There are more noticeable problems, such as lack of manager's capability of IMS realization into the practice, difficulties with coordinating different standards and high cost of system standardization. It should be marked that the research participants emphasized the same barriers as the researchers mention in their research reports on IMS. Thus IMS development should be considered not only by the practitioners themselves, but also by IMS experts and researchers.*

*The article gives value both to professionals and to scientists who are interested in practice of integrated management systems and in management particularities arrived on the cultural differences.*

**Key words:** *integrated management system (IMS), management standards, management optimization, enterprise performance optimization, SME, Lithuania.*

**JEL:** L15

### **A kis- és középvállalkozások irányításának optimalizálása Litvániában: az integrált irányítási rendszer – az imázsért vagy a hatékonyságért?**

#### **Összefoglalás**

*A publikáció célja beazonosítani az integrált irányítási rendszer (IMS) fő mozgatórugóit a kis- és középvállalkozások (SME) esetében. A kutatás meta elemzésen, statisztikai adatok elemzésén és vezetői interjúkon alapult. Az interjúk során 124 cég képviselőjét kérdeztem meg. A vizsgálatok alapján kimutatható, hogy a kis- és középvállalkozások Litvániában sikeresen alkalmazzák az integrált irányítási rendszert a gyakorlatban. Az integrált irányítási rendszer legjelentősebb haszna a dokumentációk kezelésében, minőségirányítás megvalósításában, a környezetvédelemben, a szervezeti imázs erősítésében és a versenyképesség fokozásában figyelhető meg. A sikeres integrált irányítási rendszer megvalósításának legnagyobb akadálya, hogy amikor bevezetésre kerül, akkor hiányzik az a munkavállalói motiváció, hogy más módon viselkedjenek. Fontos probléma még emellett a menedzseri képesség hiánya abban, hogy az integrált irányítási rendszert a gyakorlatban is alkalmazzák. Nehézség jelent a különböző*

*standardok koordinálása és a rendszer szabványosításának magas költsége. Megjegyzendő, hogy a kutatás résztvevői ugyanazokat a korlátokat hangsúlyozták, melyeket a kutatók említettek kutatási jelentéseikben. A cikk hasznos lehet azoknak a szakmabeliek és kutatók számára, akik érdeklődnek az integrált irányítási rendszerek gyakorlati működésében és azokban az irányítási sajátosságokban, melyek a kulturális különbözőségekből adódnak.*

**Kulcsszavak:** *kkv-szektor, kulturális különbségek, metaelemzés, vezetői interjú*  
**JEL:** L15

## **Introduction**

Unceasingly increasing competition and the pressure of society to develop business harmoniously is forcing organizations to concern not only the quality of their products and services, but also the impact of their work on natural and social environment as well as their employees' health. With a goal to successfully adapt to this complex problematic situation, the organizations optimize the management processes – to implement the so-called integrated management systems in that way combining the management of standardized processes of quality management, environmental protection and employees' health and safety (Raisiene, 2010; De Orivera et al., 2010; Zeng et al., 2010; Salomone et al., 2012). Integration of management systems may also be associated with motives of image formation, reputation boost and increase of attractiveness for the client (Makau, 2003; De Orivera et al., 2010; Bagdonienė, Paulavičienė, 2010). By demonstrating a responsible attitude to the consequences of their work, organizations gain a higher clients' trust and employees' loyalty, hold a bigger part of the market and increase the possibilities of investment and yield as the time goes (Dalglish, 2005; Barnes, 2000). Furthermore, integration of management systems carries an economical benefit which is obtained by optimizing the management resources, firstly – by uniting the organization's information flows and the control of work condition and results. (Harjeev et al., 2010, Arifin et al., 2009). In the words of Karapetrovic and Jonker (2003, p.451), and integrated management system is a system of systems. Due to this reason, it is understandable, that to create, implement and manage this type of system is not a simple task for the organizations. The scale of integration and the success of realization rely on numerous factors. The first factor is a possibility to appoint the necessary financial, human and intellectual resources (knowledge and experience). Other factors, such as the structure of the organization and geographical dislocation condition the determination to unite the management systems as well. Asif with co-authors claims, that particularly the structural complexity of organizations causes the strongest resistance from managers when planning to implement the integrated management systems. (Asif et al. 2010). Complex structures are characteristic to big organizations. However, particularly large corporations are provided with the highest economic benefit, ability to significantly increase the efficiency of work and a guarantee to sustainable development through the usage of integrated management systems.

On the other hand, how do the small and medium enterprises evaluate the benefit of IMS and what factors motivate them to implement IMS? Do the enterprises in Lithuania have any specifics compared to the practice of foreign countries? With a goal to answer these questions, an empirical research was carried out, the goal of which is to identify the main drivers to the integrated management system in SME in Lithuania.

The first part of the article reviews the positive and negative aspects of IMS as claimed by the researchers. In the second part, the results of empirical research are presented. In the end of the article, insights and conclusions are formed.

### **Material and method**

The following methods of research were implemented: i) analysis of scientific and special literature that presents the requirements, models and research results of IMS; ii) analysis of statistical data; iii) empirical survey. Research was implemented in February-May of 2012.

As of the first of March, 2012, there were 2219 organizations in Lithuania, 225 of which were implemented 3 or more standards (ISO 9001, ISO 14001, OHSAS 18001). Our research population was formed particularly out of these organizations. For the calculation of representative sample, a Paniott's formula is used:

$$n=1/(\Delta^2+1/N) \quad (1)$$

where:

n- sample size;

$\Delta$ - allowed calculation error;

N- size of population.

In this research, a 5 per cent allowed calculation error was chosen. Due to this reason, the representative sample contained 142 organizations. A random selection was applied to carry out the research. Leaders from 142 organizations were questioned with questionnaires sent through e-mail. The return of the questionnaires was 84.6 per cent.

The questionnaire was prepared on the basis of generalizations obtained by analyzing the literature in which the advantages, disadvantages, development possibilities and other practical aspects were examined.

The questionnaire contained 6 closed-ended questions. The questions were meant to clarify: 1) how have the organizational work processes and management changed after having implemented the IMS; 2) what external factors motivated implementing IMS; 3) what internal factors motivated implement IMS; 4) to what extension has IMS satisfied the expectations of the respondents; 5) what particular expectations were not satisfied by IMS; 6) what barriers occurred while implementing IMS in the organization. The respondents were also asked to evaluate how have changed the indicated organizational work and management fields. Research results were analyzed and summarized, and presented in figures.

### **Short view to international standards for managing of organizations**

As a response to the pressure of competitive market, a set of international management standards has been made to increase the effectiveness of organizations' work.

The first standard was the quality management standard ISO 9001. Later on, environmental protection management standard (ISO 14001) has been made. At the moment, organizations refer to employees' health and safety (OHSAS 18001), financial management (Sarbanes-Oxley Section 404), social responsibility (SA 8000), sustainable development (BS 8900), business continuity (BS 25999), food safety (ISO 22000), information safety (ISO 27001), informational technology service management (ISO

20000) standards. In addition, industries also refer to specific supply chain (ISO 28000), chemicals (RC 14001), automobiles (ISO/TS 16949), air space (AS 9100), medical devices (ISO 13485), telecommunication (TL 9000), testing and calibrating laboratories (ISO/IEC 17025) standards.

The variety of organizations makes it impossible to create a single standard that would cover their all possible activities and processes. However, few standards are relevant for almost all organizations. These are the international standards of quality management, environmental protection management, employees' health and safety and social responsibility.

International Organization for Standardization confirmed the first series of standards (ISO 9000) in 1987 and the second one in 1994. At first, standard ISO 9001 was meant to describe the organizational policy, procedures and rules that give the ability to ensure equal quality or organizational work. Later, in the standard edited in the year 2000, client and identification and satisfaction of his needs became the center of concern of ISO 9001. According to data of 2012, 1336 organizations in Lithuania have certificated their quality management system (Sertifikuotos kokybės ..., 2012).

Another, international standard of environmental management (ISO 14001) was formed on the basis of quality standard set ISO 9000 in 1996. It describes the organization's environmental protection management system as associated and together functioning elements, that allow ensuring effective and efficient management of activity or products and services that have or might have an effect on the environment. In Lithuania, organizations' commitment to conserve environment is also strong – according to data of Lithuanian department for standardization, in July 2010, 582 organizations had certificated environmental management systems, and in November this number was over 630 (Informacija apie sertifikuotas vadybos sistemas: sertifikuotos aplinkos vadybos sistemos, 2010). According to data of November 2012, 776 organizations in Lithuania have already certificated their environmental management system (Sertifikuotos aplinkos ..., 2012).

Employees' health and safety management system is standardized after the standard OHSAS 18001:1999, the authorship of which is assigned to a few organizations of standardization, certification and consultation (OHSAS 18001). The standard OHSAS 18001 is meant to help organizations to minimize the negative work effect for employees and to control the risks for employees' health and safety. In Lithuania, there are 402 organizations certificated their Employees' health and safety management system (Sertifikuotos darbuotojų saugos..., 2012)

The organizational management of social responsibility was standardized in 1997. The goal of the standard SA 8000 is to ensure employees' rights and international conventions, associated with the main human rights, children rights, non-discrimination principle, prevention of forced labor, penalty law, employee's right to healthy and safe environment, rights of establishment and functioning of professional associations and unions etc. (SAI, 1999).

### **Dares of management systems integration**

There are a few reasons why integration of management systems is beneficial for the organizations: i) it allows the organizations to decrease the extent of documentation and bureaucracy which arises due to work organizing and control, referring to separate procedures or different standards; ii) it allows saving resources, entrusting the management of the integrated management system to one leader instead of appointing

separate leaders to each and every management system, including the certificated one; iii) it allows carrying out an internal and external audit more clearly and effectively; iv) it promotes concentrating on the organization's activity improving and the strengthening of connections between quality, employees' health and safety and social responsibility (Jorgensen et al., 2006; Pojasek, 2006).

Nevertheless, standardizing integrated management systems with common documentation is difficult due to the variety of organizational goals and characteristics and the uncertainty of management, which is influenced by a changing external environment. Talking about the coordination and supervision of management systems, it should be marked, that this activity is complex, requiring constant redesigning and at the same time innovations in separate management areas. Long-term united efforts of strategic level leaders and high level of organizational maturity is required to ensure fluent stages of planning, preparing the documentations (policies, procedures, orders), implementation and realization of integrated management systems (Bernardo et al., 2009).

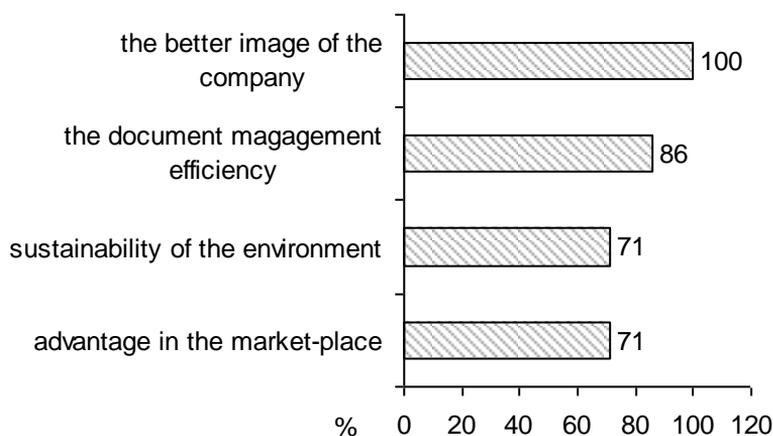
Both in theoretical and practical level of implementation of the integrated management systems a few key problems arise. Those problems could be divided into two categories. So called internal barriers could be assign to the first category. They are: i) problematic resources (lack of financial, lack of management and staff knowledge and skills, lack of employ involvement and motivation); ii) implementation problems (culture differences between disciplines, complexity and differences among systems); iii) negative attitudes and perceptions (resistant to change, low awareness of the benefits, short term orientation).

For the second category could be assigned external barriers: barriers in support and guidance (lack of support schemes, lack of experienced consultants to assist companies, lack of promotion of IMS); ii) barriers in economics (uncertainty about the value of IMS in market); iii) problematic certification issue (high cost of certification/verification, duplication of efforts between certifiers and internal auditors) (Suditu, 2007, p.216-217).

## **Research results**

The work processes and their management changes after implementing IMS were basically evaluated positively by the organizations' managers. Research participants argued that some of the management areas enhanced obviously. Those areas are: organization's image (denoted by 100% of managers), paper management (pointed out by 86% of respondents), impact on the environment (indicated by 71% of respondents), advantage in the market (indicated by 71% of respondents) (Fig. 1).

After having inquired what external factors motivated the implementation of IMS, it turned out that the most important external factors are the challenges of a dynamic and demanding market, in other words – an economic necessity. The organizations' heads expected that IMS would allow to increase the organization's competitiveness and profitability, enhance their image as well as to attract the abroad investment or to expand their market to the abroad.



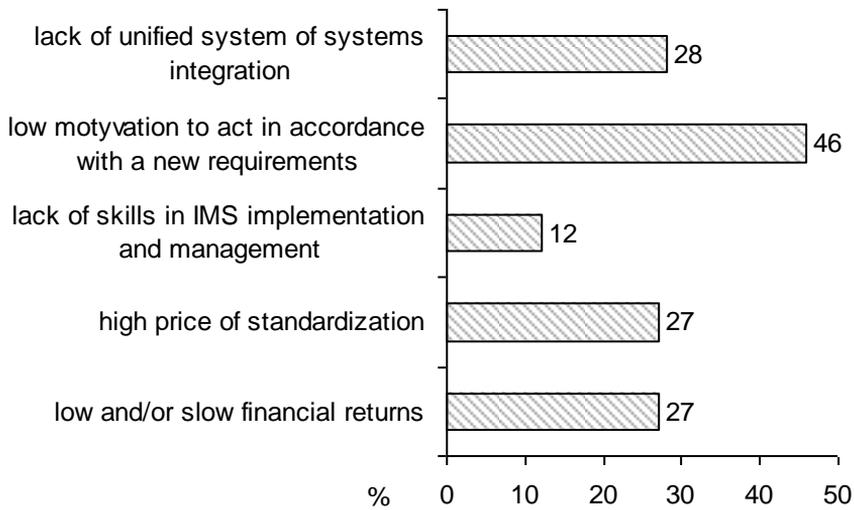
**Figure 1: Organizational areas enhanced after implementation of the IMS**

*Source: Own calculation*

Talking about internal factors which motivated the integration of management systems, the questioned leaders have marked the need to improve the quality of products, reduce the cost of management, production consumption and spoilage and to optimize the management of document management.

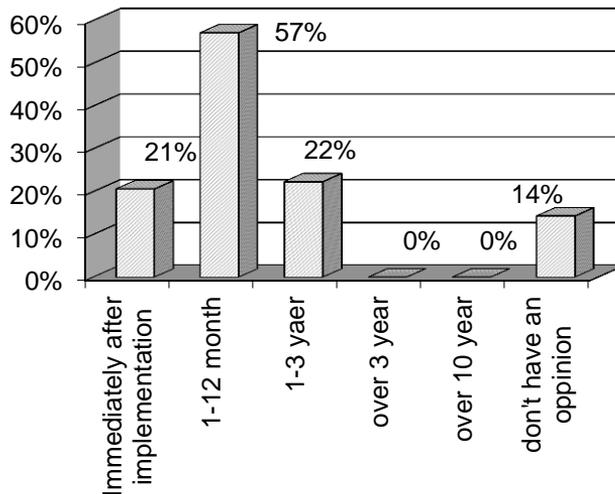
During the research, we wanted to find out, at what scale did IMS satisfy the expectations of the researched organizations' leaders. The survey results have shown that the leaders are satisfied with the effect of IMS. Even 87% of the questioned leaders answered, that their expectations and the organization's achievements after implementation the IMS are proportional. 14% of the research participants noticed a significant progress of some particular fields, however calmed that the results of IMS in comparison with their expectations were disappointing. According to the questioned leaders, the least satisfied expectation was the hope that usage of IMS will attract abroad investment and facilitate the organization's penetration into abroad markets.

Further in the research, we wanted to find out what barriers of IMS realization the organizations run into according to the managers' opinion. It is important to notice, that the majority of the respondents have not indicated any problems of IMS implementation. Only one essential problem was determined in a wide circle of the research participants. It is the lack of organization's workers and leaders motivation to change and act following the IMS requirements. Other problems, though specific to a smaller part of the researched organizations are as following: i) absence of a unified standardization system from which a standard incompatibility derives; ii) lack of IMS implementation and management skills; iii) high costs of standardization; iv) low payback of the system/slow financial return (Fig.2).



**Figure 2: IMS implementation barriers**

*Source: Own calculation*



**Figure 3: The time period in which positive results of IMS are seen**

*Source: Own calculation*

The survey participants were asked about the ways of how the realization of separate organization’s standards changed after implementation of IMS. The following of quality management standard improved significantly (57 % of respondents agreed or strongly agreed). Following of environmental protection standards has also improved significantly (agreed and strong agreed 36 % of respondents). IMS weakest influenced of occupational safety and health standard requirements of (16 % of respondents agreed or

strongly agreed). However, the respondents have not noticed any changes in the realization of social responsibility standard.

The last question was asked in order to evaluate the average period of time after which positive changes are noticed after implementation of IMS. It was discovered that in 78 cases out of 100, IMS gives obvious benefit for the organization in a period of one year (Fig.3).

## **Conclusions and recommendations**

After generalizing the results of theoretical analysis and empirical research, several conclusions may be formed:

1. The goal of IMS is to provide organizations with the opportunity to optimize their management processes and to save resources (time, financial, human etc.). The empirical research has shown the SME do not use all the IMS possibilities in Lithuania. However, the benefit of IMS is undoubted. IMS provides the biggest benefit when talking about the management of documents on the standards being realized by the organizations, realization of quality management standard, environmental preservation, and improvement of organization's image and increase of competitiveness.
2. The main factor of IMS development in the Lithuanian SME is the competitive struggle and the reach to reduce the production costs. The research has shown that after implementation of IMS in most cases the competitiveness is successfully increased. However, this is not the case with cost reduction. According to the fact the IMS implementers face with a huge resistance to following the IMS requirements from workers and leaders, an assumption may be done that particularly this factor is the biggest barrier in achieving the performance efficiency.
3. The main barriers that Lithuanian organizations experience during realization of IMS are the lack of employees' motivation to behave in new way when IMS is implemented, the lack of capability of IMS realization into the practice, difficulties with coordinating different standards and high costs of system standardization. Despite of the research participants having emphasized only these obstacles, they are the same as the researchers mention in their research reports on IMS.
4. Despite of SME certifying the workers' safety and health care system and implementing the social responsibility standard, managers have no expectations in their respect and feel no tangible benefit. It is typical to Lithuania. According to this, it may be stated that the only function of application of these standards in Lithuanian SME is image formation.
5. When evaluating the SME managers' attitude to IMS, it was noticed that IMS goal, positives and limitations are poorly understood. Heads of organizations are not putting enough effort to ensure rational usage of IMS. At the same time, the expectations that IMS will solve all the problems related to organization's work planning, reputation and will change the organizational culture are inadequate.

Long-term unified effort from strategic level leaders and high level of organizational maturity is required in order to make the stages of IMS planning, preparation of documentation, implementation and realization fluent. Coordination and maintenance of management systems is a complex work, that requires constant redesigning and at the same time innovations in separate fields. Thus, providing the recommendations to SME, a necessity of deepening IMS knowledge on the organizational management level should

be emphasized. Improvements of basic managerial skills, for example, strategic management, work planning and task distribution, employ work load planning, staff motivation, cost/consumptions analysis is recommended as well.

## References

- Asif M. – De Bruijn E.J. – Fisscher O. – Searcy C. (2010) Meta-management of integration of management systems, *The TQM Journal*, Vol. 22 Iss: 6, pp.570 – 582.
- Bagdonienė D. – Paulavičienė E. (2010) Socialinės atsakomybės ir organizacijos vadybos sistemos integravimas, *Ekonomika ir vadyba- Economics and Management*. Vol.15, p. 366-373
- Barnes F. (2000). *Good Business Sense Is Key To Confronting ISO 9000*. Review of Business, Spring, 11-15.
- Bernardo M. – Casadesus M. – Karapetrovic S. – Heras I. (2009) How integrated are environmental, quality and other standardized management system. An empirical study. *Journal of Cleaner production*. Vol. 17, p.742-750.
- Dalgleish S. (2005). Probing the Limits: ISO 9001 proves ineffective. <http://www.qualitymag.com/CDA/Archives/17062620c7c38010VgnVCM100000f932a8c0>
- De Orivera J. A. – Oliveira O.J. – De Nadaia J. (2010) Integrated Management Systems in Industrial Companies of the São Paulo State – Brazil. POMS 21st annual conference, Vancouver, Kanada, May 7-10, [khttp://www.pomsmeetings.org/ConfProceedings/015/FullPapers/015-0055.pdf](http://www.pomsmeetings.org/ConfProceedings/015/FullPapers/015-0055.pdf)
- Harjeev K. – Khanna S.C. – Laroija D.D. – Sharma (2010) Integrated management systems in Indian manufacturing organizations: Some key findings from an empirical study, *The TQM Journal*, Vol. 22 Iss: 6, pp.670 – 686
- Informacija apie sertifikuotas vadybos sistemas: sertifikuotos aplinkos vadybos sistemos, 2010, [http://www.lsd.lt/typo\\_new/index.php?id=157](http://www.lsd.lt/typo_new/index.php?id=157)
- Jorgensen T.H. – Remmen A. – Mellado M. (2006) Integrated management systems – three different levels of integration. *Journal of Cleaner Production*, Vol.14 (8), p.713-722.
- Karapetrovic S. – Jonker J. (2003). Integration of standardized management systems: searching for a recipe and ingredients. *Total Quality Management & Business Excellence*, Vol. 14(4), p. 451 – 459.
- Makau D. (2003) SME integrated management system: a proposed experiences model. *The TQM Magazine*, Nr. 15, p. 44-45
- OHSAS 18001 Occupational Health and Safety Zone, 2011, <http://www.ohsas-18001-occupational-health-and-safety.com/who.html>
- Pojasek R.B. (2006) Is Your Integrated Management System Really Integrated? *Environmental Quality Management*, Vol. 16(2), p.89-97.
- SAI Global AS/NZS 4581-1999. Management System Integration. Guidance to Business, Government and Community Organizations, Sydney, Australia, 1999.
- Salomone R. – Clasadonte M.T. – Proto M. – Raggi A. – Arzoumanidis I. – Ioppolo G. – Lo Giudice A. – Malandrino O. – Matarazzo A. – Petti L. – Saija G. – Supino S. – Zamagni A. (2012) Product-oriented environmental management system (POEMS) in the agri-food sector: main results of the EMAF project. VIIIth International Conference on Life Cycle Assessment in the Agri-Food Sector - October 2-4, 2012 Saint-Malo France.

- Sertifikuotos aplinkos vadybos sistemos, Informacija apie sertifikuotas vadybos sistemas, 2012, [http://www.lsd.lt/typo\\_new/fileadmin/Failai/2012\\_11\\_AVS.pdf](http://www.lsd.lt/typo_new/fileadmin/Failai/2012_11_AVS.pdf)
- Sertifikuotos darbuotojų sveikatos ir saugos vadybos sistemos, Informacija apie sertifikuotas vadybos sistemas, 2012, [http://www.lsd.lt/typo\\_new/fileadmin/Failai/2012\\_11\\_OHSAS.pdf](http://www.lsd.lt/typo_new/fileadmin/Failai/2012_11_OHSAS.pdf)
- Sertifikuotos kokybės vadybos sistemos, Informacija apie sertifikuotas vadybos sistemas, 2012, [http://www.lsd.lt/typo\\_new/index.php?id=157](http://www.lsd.lt/typo_new/index.php?id=157)
- Suditu C. (2007) Positive and negative aspects regarding the implementation of an integrated quality, environmental, health and safety management system, Annals of the Oradea University, VI/XVI, 2013-2017.
- The ISO. Survey of ISO 9000 and ISO 14000 Certificates. Twelfth cycle: up to and including 31 December 2002. International Organization for Standardization, Geneva, 2003
- Zeng S.X. – Tam V.W.Y. – Le K.N. (2010) Towards Effectiveness of Integrated Management Systems for Enterprises. Inzinerine Ekonomika-Engineering Economics, Vol. 21(2), 1771-179.

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