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REORGANIZATION OF THE ENVIRONMENTAL MANAGEMENT SYSTEM IN THE PROCESS OF MERGERES – PRACTICAL ASPECTS

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ABSTRACT: The aim of the article is to present a way to reorganize the environmental management system in the situation of merging companies. This problem was presented on the example of five energy sector companies, which as a result of the consolidation process formed one entity with the group structure. The article is of a practical nature mainly due to the presentation of the implemented principles of assessment of environmental aspects as well as the presentation of the requirements of the new environmental management standard.

KEY WORDS: company consolidation, mergers, acquisitions, environmental management system

Introduction

The analysis of the functioning of most of the world's economies allows one to see clearly many characteristic phenomena. These include, first and foremost, the increasing role of Value Businesses Management in increasingly less stable market conditions. This may be linked, *inter alia*, to the dynamically growing role of the financial markets as well as to the role of capital itself in business management. In recent years it has become evident that businesses are using different concepts to increase efficiency and reduce operating costs. Undoubtedly, these include the use of outsourcing concepts or the radical overhaul of organizational structures, most often linked to employment restructuring. One of the most common activities that has gained in importance in recent years, due to its universality, is the consolidation of economic entities¹. In such case, the effects of consolidation related to the increase in the value of an enterprise are visible, *inter alia*, as a result of economies of scale and market share (for example: Białowaś, 2015a, p. 234-243; Białowaś, 2015b, p. 45; Suszyński, 2003, p. 276-288). Consolidation of entities, besides many easily achieved effects, also results in a number of cost-generating effects. This is due to, for instance, the need to arrange organizational structures after consolidation, unification of management systems with particular emphasis on standardized systems and elimination of duplicate functions. When talking about cost reduction and radical restructuring processes, undoubtedly cost-effective environmental management systems can be questioned here. However, given that commercial organizations must meet many formal and legal conditions, it may be true that the role and shape of environmental management systems is changing, but their functioning in enterprises is not notably limited even in the case of radical restructuring processes.

The purpose of this article is to assess the impact of organizational changes resulting from the merger of companies on the operation of a standardized environmental management system. The issues discussed in the article will concern the case of consolidation of five companies operating in the energy sector².

¹ There have been the entities of the energy sector to be mentioned as examples of the biggest consolidation processes concerning Polish organizations in recent years.

² The article is based on the personal experience of the author, who was the strategy director of the Lower Silesia concern and was responsible for carrying out the first project in Poland in the electricity distribution subdivision, devoted to redevelopment and certification of an integrated management system, which was an element of the environmental management system.

General characteristics of the environmental management system

It can be said that every company operating on the market has an environmental management system³. This system can be more or less effective and, consequently, cause a greater or lesser impact on the environment. Undoubtedly, the environmental management effectiveness of the organization complies with the ISO 14001:2015 system. Furthermore, the consistent and perfecting actions taken in the coming years are aimed at reducing environmental impact (in line with the idea of the afore mentioned standard). The main mechanism by which the system should operate is the management of the environmental aspects. The environmental aspect recognizes any effect of the organization's processes that causes changes in the environment of the organization, both unfavorable and positive. Among examples of negative environmental aspects are waste, all kinds of organized and unorganized emissions, water and electricity consumption etc. An interesting example of a positive environmental aspect is water oxidation in a hydroelectric power plants as a result of passing through a turbine. In accordance with the requirements of the system, any organization wishing to have a system compliant with the requirements of ISO 14001: 2015 should identify environmental aspects (the current standard does not require the organization to have a procedure for identifying these aspects as it was required in its earlier version), make inventory and impact assessments, take measures to reduce the impact of those aspects that have the greatest impact on the environment.

It should be noted that the new standard attributes the most significant environmental aspects to the greatest risks of an enterprise, which seems to be in line with modern organizational management trends⁴. The simple and logical mechanism on which the standard was built alongside its other formal requirements regarding the internal audit system, identifying objectives, the build-up of pro-quality awareness, the formulation of environmental policies and the mechanism of continuous improvement, all of these lead to environmental issues systematization at the microeconomic level (Pochyluk, Grudowski, Szymański, 1999, p. 51-162). Standard requirements have been in recent years of evolution (the last change introduced in the standard took

³ This is not a place for a system that complies with specific requirements (e.g. norms). Formulating this concept, the author has the power to think of such functions as in any business, such as waste management or compliance with legal requirements.

⁴ The necessity of paying compensations because of negative environmental impact can be a source of significant reduction in the value of a company, public companies listed on a stock exchange in particular.

place in September 2015). The most important changes include enhancing the role of the environmental management system in the strategic planning of the company, the greater commitment of the organization to influence its suppliers in terms of environmental protection, which is particularly important in view of the intensification of outsourcing processes. It is important to bear in mind that economic practice has accused the authors of an anachronism in matters of documentation system. Over the years before 2015, the requirements of the ISO 14000 series, which was the domain of any other standardized system, were centered on the records in the documentation confirming the existence of the events. The permanent development of information techniques and information technology, their spread in even small organizations has resulted in many records being reflected in information systems. Therefore, in the new standard, the authors rightfully departed from using the terms “documents and records” in the documentation for the sake of a new term, namely „documented information”. This also makes it easier to integrate with other standardized systems.

An important element to note is the lack of standardized criteria for assessing the importance of particular environmental aspects identified. Liberal regulation in this area forces the functioning of differentiated standardized environmental management systems in enterprises, in particular in range of their effectiveness. It is one of the main elements that affects the need to modify the environmental management system during the processes of merging business entities. The lack of standardized criteria concerning the assessment of the aspects causes different organizations to have diversified systems, despite being evaluated as conforming with the requirements of the same standard in the wake of their certification process. It is worth emphasizing, however, that even, possible to occur in different organizations, extremely different efficiency of systems, resulting from restrictive or liberal criteria of their evaluation, the sole fact that actions were taken to reduce the impact on the environment should be regarded as very beneficial. Nevertheless, it should be borne in mind that as much as the aspects may differ, the criteria for their identification must be transparent and quantifiable (Whitelaw, 2004, p. 4).

Changes in the functioning of the environmental management system – case study

As mentioned earlier in this article, consolidation of an organization, regardless of the number of entities being part of the new structure, results in taking a number of adjustment actions. In this case, the consolidation process is understood as a merger of two or more companies, for example as a

result of a merger or acquisition. In the illustrated example, it is significant that as a result of the merger of five independent companies, one legal entity with a corporate structure was formed – former independent companies became subsidiaries of the consortium. Further conclusions will be made on the basis of an analysis of the actions taken as a result of the consolidation of five companies from energy sector⁵. A simplified model of changes in the functioning of entities is illustrated below.

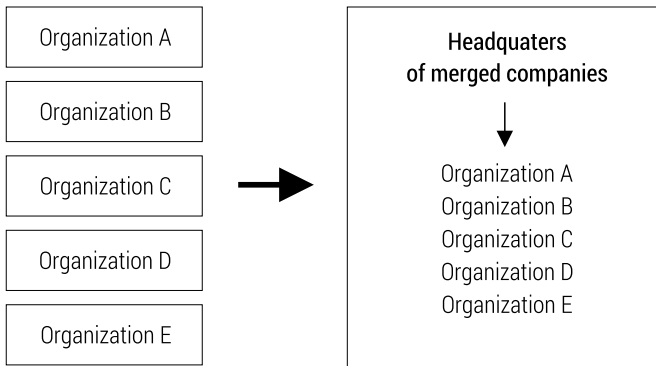


Figure 1. Changes in the functioning of entities before and after the consolidation

Source: authors' own work.

Up to the moment of the merger of five companies, they were fully autonomous in the design and implementation of pro-environmental policies. Although each of the five organizations under review went through formal third-party audits for conformance to the ISO 14000 standard and was certified for compliance with the norms, a detailed analysis of the system before the consolidation indicated a number of differences in system performance.

Among the most important ones are:

- Different number of environmental aspects and varied criteria for qualification of significant and insignificant aspects.
- Diverse policy in reducing environmental impact.
- Diverse number of environmental management programs.
- Diverse environmental objectives.
- Diverse performance assessment based on the system of indicators.

⁵ The necessary condition to consolidate companies was a government consolidation program for the electrical power engineering sector, which, despite many modifications and evolutions, has been ongoing to date.

The above defined differences are all of greater importance because the researched organizations were characterized by similar processes due to their actions in the same sector. According to the author, this is a natural phenomenon and it stems from the nature of the requirements that make it possible to shape the system freely. However, from a point of view of the effectiveness of the system, with no doubt must it be recognized that these systems, operating in the same organizations, differed significantly. Examples of detailed differences in the criteria for assessing environmental aspects for the two organizations are presented in table 1 and table 2.

Table 1. Criteria for assessing environmental aspects in the examined organization A

Impact assessment *	Validity for the organization assessment*
A – scale of influence	E – the impact of the law (including decision coverage, permission, etc.)
B – impact severity	F – the impact of interested parties (including complaints and social reception of organizations)
C – probability of occurrence	G – economic impact (fees and environmental costs)
D – duration of impact on the environment	H – technical feasibility of changing influence (market availability)
	I – the possibility of a financial change of influence (generating appropriate funds)
	J – organizational capacity to change influence (including impact on other processes and activities)

* scale rating 0-3
 Qualification: 0-10 – irrelevant, 11-20 – moderate, 21-30 – significant

Source: authors' own work based on the examined enterprise data.

Table 2. Criteria for assessing environmental aspects in the surveyed organization B

Impact assessment *
A – legal requirements – assessment of being subject to legal requirements
B – interested parties – assessment of the conflict occurrence
C – Costs
D – Energy consumption – evaluation of the phenomenon

*) rating 0 or 1
 By a significant aspect one understands each aspect which received at least one point in any criterion.

Source: authors' own work based on the examined enterprise data.

As it is apparent from tables 1 and 2, in the organizations that went through the consolidation process a very diverse methodology was applied to assess environmental impact. The implication of this was a strongly varied policy of the newly established company formed on the basis of five autonomous enterprises, which had to be remodelled. It is worth noting that if there are standardized environmental impact assessments contained in ISO 14001 series standards, in the guidelines regarding these in other documents, there will certainly be maintained similar level of environmental impact assessment even after the merger of different organizations.

Changes in the environmental management system after the consolidation of entities

Changes aimed at introducing a unified policy in a newly created organization should include, first of all, the redefinition of criteria for the assessment of environmental aspects. The introduction of unified rules for aspects assessment enables a rational planning process and budgeting activities aimed at reducing the impact of the organization on the environment. These actions allow the formulation of uniform environmental objectives within

the whole organization as well as the implementation of unified environmental management programs. The main stages of work performed on the reconstruction of the environmental system in the examined organization are characterized in figure 2.

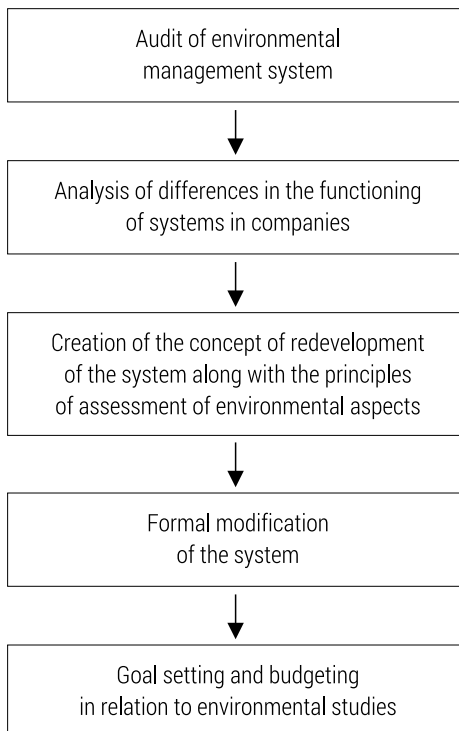


Figure 2. Stages of work in the scope of environmental management system after the consolidation of entities

Source: authors' own work.

New unified criteria for assessment of impact on the environment were introduced as a result of the system rebuilding. The criteria are shown in table 3.

Table 3. Unified criteria for environmental impact assessment after entity consolidation

Criteria for assessing environmental aspects	Description
Legal requirements	Score from 1 to 3 has been introduced depending on whether or not the environmental aspect is regulated. When the identified environmental aspect is legally regulated (both on the internal and external level) and the legal requirements for this aspect are not met, the value of the assessment is 3; when both existence of requirements and certain legal requirements meet – the value of the evaluation is 2; in any other case the value of the evaluation is 1.
Interested parties	Rating in scale 1-3. The criterion reflects the impact of the aspect on the social reception of the organization, interest in addressing specific issues by clients, authorities, social organizations and residents (including complaints) not to mention inspection bodies and institutions, such as the Inspection for Environmental Protection, the National Labor Inspectorate, the National Sanitary Inspection, the Supreme Audit Office, etc.
Environmental risk	<p>Criterion is a resultant of the following items:</p> <p>the frequency of the occurrence of environmental influences (or the estimated probability of the impact occurrence in emergency situations) and</p> <p>the potential for environmental hazards assessed on the basis of knowledge of the harmful effects on the environment in view of the content of dangerous substances or specific physico-chemical properties;</p> <p>Criteria assessed on a scale from 1 to 3 based on additional detailed tables which were not attached to the article due to their voluminosity.</p>
<p>Each aspect that has received more than 6 points is to be considered as significant. Also, each of these aspects resulting from the organization's failure to fulfill legal requirements.</p>	

Source: authors' own work.

It seems difficult to value the approach to environmental impact assessment in accordance with the presented in the article criteria applied before and after the consolidation process. It also seems difficult to assess whether, as a result of remodelled criteria, actions minimizing environmental impact of the newly created organization will be more or less intensified. However, taking into consideration the rationality of organization management at the strategic level, what most often becomes the priority is the unification of the

principles of assessment of phenomena and policies in the particular areas of the company, including the field of environmental protection.

From the afore mentioned analysis of the hereby presented phenomenon of differentiation of the environmental management system efficiency in relation to the same requirements resulting from the ISO 14000 series standards, one can clearly point out the great implications in the management and organizational sphere resulting from the modification of the organizational structure of the companies, especially in the consolidation of business entities. The example of system redevelopment presented above, also indicates that modification of widely understood management systems in the face of consolidation of organizational structures is a very laborious activity, which has its consequences in changes concerning seemingly unrelated processes such as modification of investment policy (as a result of the change of qualification of environmental aspects) but also the need to rebuild and centralize procedures and functions resulting from the elimination of autonomy in former independent entities. In the light of these considerations the continuation of the environmental management system in the face of changing conditions of its functioning is a very important issue. This causes, for example, the necessity of partially duplicated environmental systems, one of which is the continuation of environmental programs that have been implemented so far (reducing the impact of processes on the environment) and the other results from new programs which are rooted in modified (unified) environmental aspects.

Conclusions

In conclusion, it is important to reflect on the future of environmental management systems in the light of changes that are noticeable in terms of operating conditions. Certainly, it is important to note the growing business responsibility and the risk to the organization in the event of a negative impact on the environment. On the other hand, it should be borne in mind that commercial entities are striving to increase their profitability with each passing year – this remark concerns especially public entities listed on stock exchanges, which results from the strong pressure of shareholders to demonstrate systematic growth of financial results. It is obvious that pro-environmental actions are cost-intensive – especially in the case of manufacturing companies, and thus may affect the reduction of profitability. Everything points to the fact that a „counterbalance” to the potential depreciation of environmental management systems is precisely the risk of environmental impacts and possible costs arising therefrom.

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