Effect of the integrated management system on the occupational safety and health in enterprises: a case study[1]

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Abstract

More and more importance is being attached to the problems of safe and healthy working conditions. Furthermore, it is being emphasized that the more critical role in this area should be played not only by legal regulations but by the activities taken in enterprises. The aim of this study was to analyse the approach to the occupational safety and health, and to find out whether this approach is characterized by the systematic management of the occupational safety and health and/or represents an aspect of the integrated system of quality management, environmental management and occupational safety and health management. The particular focus was on the reasons and/or barriers for the use of the indicated system approach to management, including the integrated management. Indicating these relationships in the context of the solutions used in the enterprise that functions in Poland was adopted as a specific aim of this study.

Keywords

Occupational safety and health, occupational safety and health management system, integrated management system

JEL Classification: J28, M54

Introduction

Nowadays, with the variability of the economic reality, the problems concerning humans and their work are becoming more and more important, pointing to the need for initiatives oriented at improved competitiveness of enterprises. These activities should be connected with verification of the approach to the development of human potential. It is humans and their work and, engagement in the performance of their

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work in the enterprise, which can and should now become the source of the competitive advantage. Actually, this occurs through performance of specific tasks in such areas as e.g. workplace, personal function, working conditions.

Observation of the economic practice suggests that the last of the above areas, i.e. working conditions, is becoming critical. In the related literature, working conditions refer to the components of the enterprise connected with the type and the nature of the work performed. These components include in particular physical working conditions (material components, such as machines, workplace equipment; physical components, such as temperature, lighting, noise, chemical and biological components), working time, social and living activity and employment relationships (Pocztwoski, 1998).

Therefore, it should be emphasized that the development of the working conditions that are adequate to the needs and abilities of people who perform work and to the conditions the enterprise operates in, is conducive to the achievement of higher satisfaction from the performed work and, consequently, improvement of the results of widely understood enterprise management, which translates into the interesting problem of improving the enterprise competitiveness. Humans are able to work even in very hard conditions. However, working productively while maintaining good health status is possible only in the environment that suits the person's physical, mental and social needs and opportunities (Cierniak-Emerych, 2006).

To the people who start work, the critical factor, apart from the level and structure of incomes obtained for the performance of the work, is the sense of safety. This concerns in particular the safety related to being employed, defined as the certainty of having a job and working conditions safety, that is, occupational safety and health. In economic practice, occupational safety and health, understood to mean protecting employees against the threats to their health and life, they are exposed to at work (Studenski, 2000) and reflected by physical and non-physical components of working conditions, is becoming especially important. While referring to the experience of the western enterprises, the related literature has stressed more and more frequently the direct relationships between the improvement in the level of the occupational safety and health in the enterprise and good business management (Ejdys, Kobylińska, Lulewicz-Sas, 2012), which results in the achievement of the profits.

In this context, the attempts made in the scientific studies to distinguish between the levels of the occupational safety and health should be emphasized. Four levels of the occupational safety and health have been emphasized most often: level 1 (fear), level 2 (punishment), level 3 (reward), and level 4 (internal motivation) (for more details see e.g. Cierniak-Emerych,2012).

The level 1 concerns the enterprises that do not attach significance to ensuring safe and healthy working conditions. Consequently, it is typical of these enterprises to achieve the results obtained as incomplete consistency with the adopted standards, with particular focus on legal regulations. The area of the occupational safety and health in these enterprises, especially the lack of noticeable manifestations of the use of personal or collective protective equipment and even tolerance towards the inconsistency in the approach to the development of working conditions adequately to the current legal regulations, which should be considered as especially reprehensible.

The level 2 of the occupational safety and health concerns the enterprises where motivation for the activities is the fear for punishment. The characteristic method is mainly to strive for ensuring the consistency of the provisions of the documents prepared at the level of the enterprise with the respective legal regulations. However, in practice, this orientation to avoiding inconsistency can result in the fact that the consistency of the regulations contained in formal documents and legal regulations does not represent the actual status of the occupational safety and health in the enterprise (Cierniak-Emerych, 2012).

The improvement in the occupational safety and health and, consequently, the achievement of its higher levels, is conducive to taking measures of active character (level 3 and 4 of the occupational safety and health) based on adequate behaviours, observation of workplaces, quality of measures taken to develop individual physical and non-physical components of the working conditions. It is also necessary to ensure the mutual (between employees and employers) understanding of the needs for improving the level of the occupational safety and health. The important reason for permanent and positive changes in the discussed area is the sense of internal motivation, engagement and passion for improvement in the occupational safety and health experienced by both employees and managers. It can be also practicable to use the assumptions for employees' participation through inclusion (direct or indirect) of individual employees into regular improvement in working conditions. This should be conducive to feeling the sense of community in the development of not only the employees and to the management of such areas as working conditions. Furthermore, understanding of the need for investment in the occupational safety and health should represent an impulse to increase the involvement in the activities towards the achievement of the aims of the enterprise. The important variable, which represents the starting point for these positive transformations, which are conducive to the improvement in the working conditions, is the policy concerning the occupational safety and health formulated and adopted in the enterprise. This is expressed especially by the fourth of the discussed levels of the occupational safety and health. It is important that the assumptions for the occupational safety and health should be comprehensible to all staff in the enterprise, and, the particular focus should be on familiarizing all the employees with the assumptions and principles of implementation of the policy.

Bearing this in mind, one should agree with the statement which has been more and more often emphasized in the related literature that the activities taken in the area of working conditions and, therefore, occupational safety and health, should be based on the system approach and, system management (Ejdys, Kobylińska, Lulewicz-Sas, 2012). In practice, this is expressed by the presence of formalized occupational safety and health management systems.

Normalization of the occupational safety and health management systems has adopted various forms over the last twenty years (Podgórski, 2000). In this context, it is worth emphasizing that ISO has not implemented, despite certain initiatives started in this area, an international standard concerning the occupational safety and health management systems. However, there are some guidelines in this respect developed by other international organizations, e.g. ILO-OSH 2001 developed by the International Labour Organization or OHSAS 18001, developed by the British Standards Institution (Ejdys, Kobylińska, Lulewicz-Sas, 2012).

It is worth noting that the problem of improving the labour conditions and, consequently, improving the level of occupational safety and health in enterprises operating in the European Union, represents one of the major tasks formulated within the community social and employment policies. This is reflected by several acts within the community law that refer to the above problems, with the major focus on the set of community directives. In particular, this is reflected by the framework directive 89/391/WE on implementation of the measures to improve safety and health of employees at work and the relative specific directives that represent a supplementation for the framework directive. According to the framework directive, the EU member states are obliged to implement standards for the occupational safety and health. The most popular solution in this area is to use the above international management system OHSAS 18001, and, in Polish settings, the family of PN-N-18000 standards.

The occupational safety and health system should be understood as part of the general enterprise management system including all the resources and activities which are conducive to protecting people in the labour environment from the threats resulting from the labour conditions (Podgórski, 2000). It is emphasized in the literature that the efficient occupational safety and health system should contain (Kalandyk, Zapała, Maj 2010):

- an occupational safety and health policy developed for the specific enterprise,
- evaluation of the types of occupational risk, preceded by the identification of threats involved in this risk,
- aims, tasks and program ensuring continuous improvement with reference to training and improving responsibility,
- aware, competent and responsible measures in the area of the occupational safety and health taken by the managers in the enterprise,
- monitoring of the occupational safety and health system in the enterprise,
- plan of actions in case of failure and the system improvement plan.

In conclusion, the occupational safety and health management system reflects the awareness of threats, formal and informal principles used in the area of development of working conditions specific to the enterprise. Consequently, in practice, this translates into a specific approach to the occupational safety and health used in the enterprise concerning the enterprise management. It is also worth noting that even the best developed and implemented system will not perform its role if the managers and employees are not aware of the usefulness of the implementation. Furthermore, even the best system cannot ensure safety if one forgets about the necessity of continuous improvement. It also seems important to emphasize the relationships between the occupational safety and health management system in the enterprise and the environmental management system ISO 14001 and the system of quality management ISO 9001. For example, according to the PN-N-18001 standard, the occupational safety and health management system is closely related to the environmental management system as specified by the ISO 14001 standard, especially in the area of prevention and procedures in the case of failures and disasters. The relationships between the indicated systems are also reflected by the measures taken by the enterprises to implement the integrated management system composed of the independently functioning three above mention subsystems (Kalandyk, Zapała, Maj, 2010).

The aim of this study was to analyse the approach to the occupational safety and health, and to find out whether this approach is characterized by the systematic management of the occupational safety and health and/or represents an aspect of the integrated system of quality management, environmental management and occupational safety and health management. The particular focus was on the reasons and/or barriers for the use of the indicated system approach to management, including the integrated management. Indicating these relationships in the context of the solutions used in the enterprise that functions in Poland was adopted as a specific aim of this study.

1 Material and methods

The empirical examinations were performed in 2016 and in the first quarter of 2017. The pilot study , concerning identification of the approach to the development of safe and healthy working conditions, with particular focus on the recognition of the character of this approach and specification of its correlations with the system management in the area of the occupational safety and health, and indications to the reasons and/or barriers to the use of the system approach to the occupational safety and health management and, more specifically, the integrated management (safety and health, quality, environmental protection), analysed the production and service-providing enterprise from the energy sector (ZEC Service Sp. z o.o.). The enterprise operates in Poland as a limited liability company with exclusively Polish capital. It offers services both in Poland and abroad. The number of its employees is 500.

The method based on case study was chosen due to the qualitative character of the presented research problem. The major focus was on the in-depth understanding of the analysed problem rather than on the analysis of variables, which justifies the choice of this method. The method is likely to yield findings that can be merely suggested by qualitative examinations (Wójcik, 2013; in: Yin, 2009). It should be noted that studies available in the literature (e.g. findings presented by B. Flyvbjerg) emphasize more and more often that there are no generally-accepted theories with respect to human problems (development of working conditions) (Flyvbjerg, 2005, p. 47). This author enumerated the benefits of using case study practices (case study methods). Furthermore, R. Yin also recommended employing case study methodologies to find answer to the question of why a particular phenomenon occurs (Yin, 2009).

Data sources included analysis of the documents in the enterprise. The analysed documents included procedures and operating instructions, registers and forms used for the purposes of preparation of provisions concerning the occupational safety and health and the results of laboratory examinations that reflect meeting the standards concerning the occupational safety and health and the results of the audit concerning working conditions conducted in the enterprise studied by the external firm before 2015.

Furthermore, the method of participant observation was used in the research process. The research process also used a free-form interview conducted with top managers in the enterprise and employee representatives (over 80 people in total). More specifically, an in-depth interview (IDI) was used, which the direct method of the

primary survey, with the respondent is being an active object of the measurement, and the interviewees being in direct contact with the interviewers (conversation). It was assumed that this type of the examinations allows for more in-depth familiarizing and understanding of the analysed problem. The results presented in this study cannot be considered as significant in statistical terms and should be approached in categories of initial recognition of the discussed research problems and, as stressed before, in categories of presentation of a specific good practice.

2 Results

While striving for implementation of the highest standards in terms of working conditions, an audit concerning the occupational safety and health was performed in 2015 in the enterprise by the reputed external firm. Analysis of the results obtained during the audit demonstrated that the enterprise fully meets legal regulations in the area of the development of safe and healthy working conditions. The results of the audit encouraged enterprise managers to start decisions on continuation of the initiatives conducive to the improvement in the level of the occupational safety and health. To achieve this aim, the author's program for improvement in the occupational safety and health conditions was developed, with its major challenge being the idea of "zero accidents". The Executive Committee for Working Safety was also appointed and the working safety policy was formulated with one of its principal components being the cardinal principles of work safety. Among these principles (six in total), the specific importance was attached to accident events and potentially accident events.

Based on the participant observation conducted in 2016 and 2017, free-form interviews with employees and managers, and the analysis of the documentation obtained from the enterprise, this study identified the activities typical of the third level (and, in some cases even the fourth level e.g. the problem of definition of the formalized occupational safety and health policy, managerial audits concerning this area, preference for mutual trust etc.) level of occupational safety and health.

The enterprise strives for the achievement of the best possible results in the area of the occupational safety and health. The employees are positively motivated for active inclusion in the activities aimed at improvement in the occupational safety and health. The occupational safety and health unit and the respective commission are present in the enterprise. They cooperate with the occupational safety and health representatives and top managers. The specific tasks are also performed by the occupational safety and health inspector and the representatives of the workers' council and trade unions. Regular inspections of the occupational safety and health status are also conducted.

With positive attitude of both top managers and the most of the employees observed over the last two years, the revealed threats present in the working environment were eliminated. This led to the limitation of the potential and actual accidents. Especially conducive to these activities was promotion of specific characteristics of the organizational culture in the enterprise, such as norms, values, procedures based on mutual trust, engagement, team orientation, improvement in the occupational safety and health, especially promotion and continuous implementation of training and, more specifically, education in the area of occupational safety and health.

This can be considered the specific (compared to other enterprises studied) determinant and characteristics of the occupational safety and health culture.

While searching for the reasons of positive activities connected with the development of the level of the occupational safety and health in the enterprise, it is worth to emphasize that, as stressed by top managers, the activities aimed at continuous improvement are constantly started in the enterprise. This improvement can be in the form of a system activity, system management and integrated around the three principal areas, i.e. quality, environment and working safety. This is supported by the policy of an integrated management system in the three indicated areas, confirmed formally by the authorized entity, with the certifications granted by UDT-CERT, e.g. ISO 9001, ISO 14001 and PN 18001.

Conclusion

Contemporary enterprises are facing a challenge for using various tools, methods and methodologies that are conducive to the improvement in the level of occupational safety and health. Observation of the economic practice in Poland and analysis of annual reports by the National Labour Inspectorate demonstrated that not all enterprises appreciate the importance of the occupational safety and health problems considered both in the context of protection of health and life of employees but also from the standpoint of achievement of specific economic effects. It seems that one of the causes of such a status is preferring the system of norms, values, methods and procedures in these organizations, oriented mainly at achievement of the tasks while facing the lack or limited opportunities to add value to humans, their work and, in particular, their needs and expectations concerning the working conditions.

Therefore, the example of the enterprise presented in this study seems to be valuable, with both managers and employees expressing the need for creating and accepting the system of values, norms, procedures characteristic of the top level of occupational safety and health. It seems legitimate to conclude that this success in striving for the improvement in the level of the occupational safety and health should be associated with the system approach to occupational safety management and, more specifically, implementation of an integrated system for management of occupational safety and health, environment and quality.

Therefore, it is necessary to ensure continuous monitoring of the adopted standards, values, procedures, and, first and foremost, from our point of view, making employees and employers aware that the improvement in working conditions in a manner that is conducive to the improvement in the level of occupational safety and health remains in a direct relation to the achievement of the expected outcomes of a broadly understood management in the enterprise and, consequently, competing in the contemporary turbulent market.

As already mentioned, the results of the empirical survey presented in this study concerned a pilot study. These results cannot be found significant in statistical terms. Nevertheless, the investigations seem to be important and interesting and it is worth verifying them in a bigger and more representative group of the respondents, including the respondents not only from Poland but also from other countries. Bearing

this in mind, the problems presented in the study should be further researched and subjected to public discussion.

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