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Occupational health and safety with GRI indicators as exemplified by a steel enterprise

Bezpieczeństwo i higiena pracy we wskaźnikach GRI na przykładzie przedsiębiorstwa hutniczego

Abstract

The subject of occupational health and safety in terms of the GRI indicators has been presented in this article. GRI indicators are used in Corporate Social Responsibility (CSR) reporting. This article is an attempt to answer the question: are the published indicators the result of actual implementation of occupational health and safety management strategy or are they just part of building an image and reputation of a company that is socially responsible?

Keywords: *occupational health and safety, GRI indicators, social responsibility*

Streszczenie

W publikacji przedstawiono zagadnienia bezpieczeństwa i higieny pracy w ujęciu wskaźników GRI (ang. *Global Reporting Initiative*), które są stosowane w raportowaniu społecznej działalności firm (ang. CRS – *Corporate Social Responsibility*). Artykuł jest próbą odpowiedzi na pytanie: czy publikowane wskaźniki są rezultatem rzeczywistego wdrażana strategii zarządzania bezpieczeństwem i higieną pracy, czy też są tylko elementem budowania wizerunku i reputacji firmy odpowiedzialnie społecznej.

Słowa kluczowe: *bezpieczeństwo i higiena pracy, wskaźniki GRI, społeczna odpowiedzialność*

1. Introduction

Along with the development of systems of occupational health and safety management ensuring the feeling of safety in a workplace has become the most important challenge of many companies. OHS issues have fundamental significance not only because of the binding regulations but also, first of all, because of the awareness that accidents at work generate costs as for equipment shutdown, absenteeism, and possible compensations. There is a possibility of voluntary implementation of occupational health and safety management systems according to the PN-N 18001 standard. Companies which implement the segments of the system suggested in the standard aim at thorough elimination of accidents and at the same time, according the Deming cycle requirements, constantly make the system operation better, emphasizing not only material context of improving working conditions (purchasing new devices, purchasing individual protective measures), but foremost, human factor (employee trainings).

When at the end of the previous century the concept of Social Responsibility (SR) came to Poland, occupational safety became an essential part of social reporting. Since March 1999 the information included in reports can be presented in a form of a summary according to the GRI guidelines. Over the years 1999-2000 a pilot stage of reporting according to GRI was conducted in 21 selected enterprises. GRI indicators are supplemented and modified, every few years, so that they could reflect the information needs of companies and of particular groups of stakeholders most thoroughly. In May 2013 GRI published the fourth edition of reporting guidelines – GRI G4. GRI indicators are grouped in several categories: organisational profile, report structure, supervision, obligations and engagement, economic impact, environmental impact, human rights, workplace, social responsibility, product and service responsibility. In the category of workplace the information on occupational health and safety is included. Information in terms of the GRI indicators constitute a supplement of the activities described in the content of the report. The steel enterprise ArcelorMittal Poland was chosen for the purpose of the research. The choice of this enterprise was the result of a possibility to refer the information included in the report to the actual corporate activities because of the fact that the author is interested in researching the company. On the basis of the conducted analysis of the report, an attempt was made to answer the question: is the information on OHS the result of actual activities or it is only part of building a corporate image and good name? In order to get the answer to the question, particular GRI indicators in the category of OHS were referred to the activities undertaken, presented in the descriptive part of the analysed report. In conclusion, the scope of the undertaken activities in the context of the results achieved was presented.

2. Occupational health and safety in corporate social responsibility

It is a fact that the development of the idea and activity called social responsibility dates back to the 70s and 80s of the 20th century. In Poland it was at the end of the 90s , after the implementation of many corrective measures subject to the economic transformation of the state. The first companies which joined socially responsible activities are the international companies that had their branches, subsidiaries, plants in our country. Foreign investors contributed to the promotion of the concept of social responsibility on the Polish market [1].

In the reference materials there are many definitions of social responsibility. One of the most frequently quoted is the definition of Archie Carroll who states that corporate social responsibility includes economic, legal, ethical and recognition expectations which a society has towards an organisation in a given period [2]. According to ISO 26000 the responsibility for decisions taken and activity conducted, having an impact on society and environment, executed via transparent and ethical conduct, in compliance with principles of sustained development and social well-being, taking into account the expectations of stakeholders, pursuant to legal regulations and international standards of conduct, executed in an integrated way are called social responsibility [3]. On the basis of this definition in Polish articles it is assumed that social responsibility is an obligation to conduct business activity in a transparent and ethical manner in compliance with principles of sustained development and with the aim of social well-being, taking into account the expectations of stakeholders, but pursuant to legal regulations standards of conduct [4]. In the definitions of social responsibility the following issues are underlined: issues that are legal, ethical, economic, social, environmental, technical and philanthropic [5-6].

In corporate social responsibility the issues of safety belong to the legal and social realm. SR is an activity that endeavours to meet the needs of different groups of stakeholders, including employees. Regarding the legal issue, an employer undertakes to apply legal regulations, creating decent working conditions, providing for safety and protecting employees' health. As for creating proper working conditions the Code of Labour is binding. Poland as a member of the International Labour Organisation ratified proper conventions as for occupational health and safety. The current regulations in this respect are the result of international legal regulations, the EU regulations (EU directives in this respect) and current regulations, existing in the Polish legislation. The regulation of the Labour Code give employees a possibility of the refrain from performing a job, as well as being provided with safe and healthy conditions of performing a job, including , e.g., being provided with individual protection measures, medical examinations, trainings in OHS. The Labour Code specifies minimal standards in this respect, which must be fulfilled by an employer [7]. Apart from the general regulations the issue of safety is regulated in detailed regulations as for

requirements for buildings, rooms, sanitary devices, machines and technical equipment, application of chemical substances, etc. Apart from the binding provisions companies apply also ergonomic indices in order to adapt working conditions to psychophysical properties of employees. Companies, when creating a proper system of OHS management, refer to the guidelines of the PN-N 18001 standard. Analysing the social category, one encounters the issues of OHS management. This management is most often connected with developing the OHS rules, conducting risk assessment, checking and inspecting working conditions, executing programmes to improve safety, managing stress, preventing accidents, building awareness of safe work and of assessing effects of implementing OHS system, OHS trainings, exercising the binding procedures, standards [8,9].

Assuming the aforementioned concepts, the company's own definition of social responsibility has been suggested, showing the company's effectiveness in OHS. Social responsibility as for OHS is the responsibility for decisions taken and activities performed which influence working conditions, which, in turn, are to ensure the feeling of safety at work for an employee in the company's pursuit to eliminate accidents by initiating preventive actions against all accidents and occupational diseases subject to the integrated systems of enterprise management. The concept of integration regards quality (ISO 9001), environment (ISO 14001) and OHS (PN-N 18001).

3. Quantification of occupational safety in social responsibility

According to the assumptions of the socially responsible business, the results of the activities related to CSR are parts of the process of communication with stakeholders. Reports on social responsibility are one of the most popular forms of communication on the strategy, activities and effects related to CSR. The report is a key tool to inform stakeholders on the company itself, as well as its achievements.

The report consists of a descriptive part, which is subject-oriented according to the summary of the GRI indicators. The report content has been specified in 'the Guidance for defining the GRI report content'. In the report, apart from general information (included in the report introduction) regarding corporate strategy, organisational structure, groups of stakeholders, financial situation of the company, there is also information regarding: employees, society, production (impact on the environment), and ethical policy. In the category of employees, there is information on: working conditions, employee fluctuations, safety, professional development, diversity management, communication with trade unions. In the category of society there is information on the company's activities for society, e.g. promotion of sport, health, helping schools, hospitals by purchasing necessary equipment. The category of production includes mainly the issues of crucial environment aspects and environmental investment projects being executed. Under the category of ethical policy there is a description of

activities ensuring the identification of irregularities and building a concept of order [1]. There is freedom as for publishing detailed information in social reports by companies in particular industries and services. There are no requirements of verifying the data by external auditors [4, p.141].

Apart from the descriptive part in reports according to GRI, there is also a table of the GRI indicators with reference to pages in reports where one can find more information. The indicators are divided into profile and subject-related ones. The profile indicators include: corporate strategy, organisational profile, supervision, obligations and engagement, as well as parameters of reports (reporting period, date of publication, reporting cycle, contact person, etc.). The subject-related indicators are categorised according to: economic, environmental, social issues [10]. The so-called principle of 'triple bottom line' is binding [11]. According to this approach, the company's achievements should be measured through a financial and economic situation (profitability ratios), an environmental situation (actions preventing negative effects of business onto the environment) and a social situation (taking care of employees and local society) [12]. The issues of safety are reported via a category of social indicators as for practices of employment and decent work.

Quantification of activities undertaken to improve occupational safety has different levels of detail. Most frequently enterprises apply indicators regarding accidents, injuries, occupational diseases, days lost and absence at work. According to the GRI guidelines these indicators belong to LA7 category (LA – labour). Another category of indicators regards trainings in OHS and risk control (LA8 indicators). The issues of Occupational Health and Safety, specified in formal arrangements concluded with trade unions, are included in LA9. The aforementioned group of indicators is assumed as the basic one in reporting occupational safety. In figure 1 there is a diagrammed approach to the GRI indicators with special attention paid to the indicators regarding OHS.

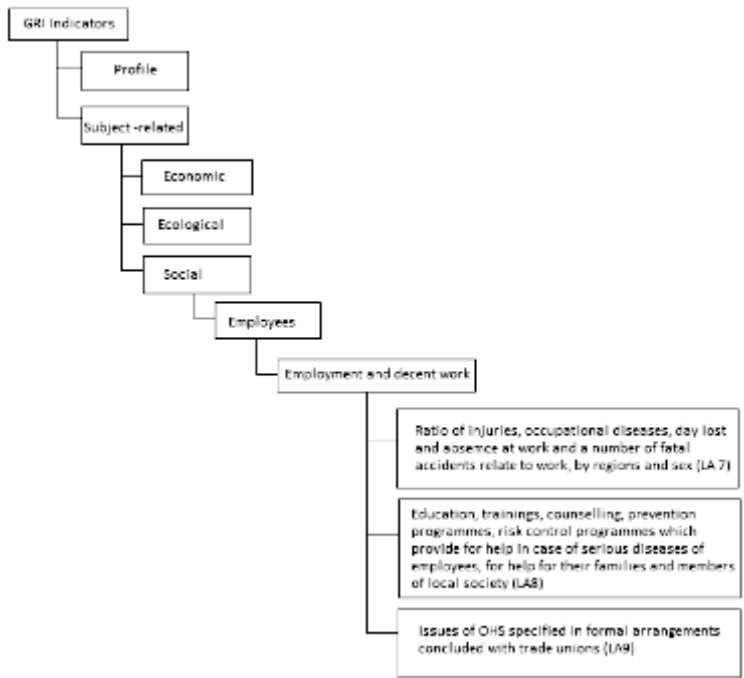

Fig. 1. The position of occupational safety in the GRI indicators
Rys. 1. Miejsce bezpieczeństwa pracy we wskaźnikach GRI
Source: own preparation on the basis of a review of structures of GRI G4 indicators

For the sake of social responsibility reporting as for OHS a company can develop a detailed scorecard for presenting the assessment of the results. When creating a structure of a scorecard one can use the classification of the indicators mentioned in table 1. A developed scorecard refers to the principle of triple bottom line. The effectiveness is understood as a degree of target execution. A suggested set of indicators (table 1) allows to identify the effects and inputs at the same time in a measurable way. An enterprise when preparing a report about OHS should, if possible, take into account the indicators representing all the levels of assessment in order to create a complex assessment in the form of a Scorecard.

Table 1. Examples of quantification of occupational safety
Tabela 1. Przykłady kwantyfikacji bezpieczeństwa pracy

Level	Target	Measure
Employees	Provide employees with safe and health working conditions	– The number of accidents at work in total, – The number of fatal, collective, serious accidents, – The rate of accident frequency, – The rate of accident seriousness, – The number of occupational diseases/1000 employees, – The number of employed persons in threat conditions /1000 employees, – The number of accidents at work/1000 employees, – The number of events potentially accident-prone /1000 employees, – The number of days of post-accident absence/1000 employees
	Take care of employees' health	– The number of stated occupational diseases, – The number of days of sickness absence/1000 employees, – The number of employees taking advantage of additional specialist and preventive examinations
	Provide employees with proper education	– The level of education of persons responsible for execution of processes (structural approach), – The number of employees participating in trainings and instructional trainings as for OHS compared to the number of employees in total
	Ensure financial motivation for the OHS unit	– The level of earnings of OHS unit employees in relation to remuneration regularly accepted for the unit in question
	Ensure involvement of the highest management	– The level of engagement of the highest management in execution of OHS processes, – The number of meetings of the highest management with the employees of the enterprise as for OHS in a given period, e.g. annually
	Ensure cooperation of employees in improving working conditions and organisation	– The level of cooperation of employees in execution of occupational risk assessment process, – The number of teams appointed for solving OHS problems
	Provide for non financial motivation	– The level of motivation of employees and engagement in improving working conditions – rate of engagement : the number of employees engaged compared to the number of employees in total
	Develop safety culture	– The level of safety culture of persons responsible for execution of processes, employees of immediate supervisions, front-line employees, other employees (testing employees' attitudes)
	Develop knowledge in occupational safety	– The level of knowledge of persons responsible for execution of particular processes, – The level of knowledge of employees, – The level of knowledge of the OHS unit, – The level of knowledge of managerial staff
	Implement OHS management system (PN-N 18001)	– Degree of compatibility of the OHS management system with requirements of PN-N-18001, – Performance of the monitoring process subject to the integrated management system, – Performance of the corrective measures process subject to the integrated management system, – Performance of the process of identification of legal requirements subject to the integrated management system

Level	Target	Measure
Processes	Identify threats and specification of occupational risk admissibility in job positions	– The number of job positions subject to occupational risk assessment (with current assessment) compared to a total number of job positions, – The number of eliminated irregularities per the ones detected during the process of occupational risk assessment , – The number of job positions with the high level of risk compared to the job positions in total
	Detect on an on-going basis existing and potential non-compliance	– The number of eliminated non-compliances regarding the technical condition of machines and equipment, detected during the monitoring process, – The number of eliminated non-compliances connected with the fact that employees do not comply with the OHS rules compared to the detected non-compliances during the monitoring process regarding, – Subject-related scope of non-compliance, the number of particular non-compliances compared to the non-compliance in total
	Provide all employees with proper knowledge of OHS, including awareness of threats in particular job positions	– The number of persons trained in OHS and in shaping employees' awareness, – The degree to which employees know the OHS rules binding in the enterprise, – The degree to which employees know the OHS problems, – The degree to which employees know threats occurring in their job positions,
	Provide the information flow "from bottom to top" and "from top to bottom"	– The number of complaints and comments regarding working conditions reported by employees, – The number of interventions taken in reply to the employee's reporting, – Frequency and scope of discussing the OHS problems in management meetings, – Frequency of discussing the OHS problems in terms of immediate supervisions with the employees, – Scope of the OHS problems discussed during the OHS committee meetings
	Reduce negative results related with system non-compliance (OHS system according to PN-N 18001)	– The number of job positions where occupational risk has been reduced, – The number of remaining corrective or/and preventive measures undertaken compared to detected non-compliance, – The number of implemented solutions improving working conditions
	Identify legal regulations regarding OHS and others and implement them	– Degree of knowing and applying legal regulations as for OHS and Rother internal and external provisions (the result of relationship between the organisation and the community)
Finances	Optimise costs of improving working conditions and safety	– The level and structure of costs incurred to improve working conditions (costs of purchasing individual protection measures, costs of repairing machines, etc.), – The level and structure of profit resulting from the reduction of machine and equipment failure, an increase of work effectiveness, etc. – The level and structure of costs incurred as for improper working conditions, including the fall of effectiveness, employees' absence, amount of compensations, etc. – The level and structure of profit resulting from the proper execution of the OHS management processes, including savings earned in connection with introduction of actions improving the course of work organisation, – The level and structure of costs as for managing human resources, including costs of trainings, – The level and structure of profit as for managing human resources e.g. profit from the fluctuation of employees with big absence or ineffective employees.

Source: Prepared on the basis of : Central Institute for Labour Protection, http://www.ciop.pl/11901.html (access: 08.03.2010)

4. Case study – social reporting in occupational health and safety as exemplified by a steel enterprise

ArcelorMittal Poland a steel production enterprise served as a case study. The company was established in 2004 on the capital of the old steel companies: Katowice, T. Sendzimir in Cracow, Florian in Świętochłowice and Cedler in Sosnowiec (the result of the governmental programme of restructuring and modernisation of iron and steel metallurgy). The established enterprise has been functioning in the structure of the global capital group of ArcelorMittal. The group invested about 4 million Polish zloty (PLN) in the modernisation of particular plants. Currently the enterprise has 70% of the production potential of Polish metallurgy industry. The company employs 10 000 people (the state on 31.12.2013) [13].

After the analysis of the GRI indicators in occupational safety for the year 2013, the following information was obtained [13, pp.24-25, 40]:

1. Rates of injuries, occupational diseases, days lost and days of absence at work (LA7):
   - The number of accidents at work in total - 22,
   - The number of fatal, collective, serious accidents - 1
   - The total number of days of incapacity for work as for accidents at work– 659,
   - The number of stated occupational diseases - 15,
   - The number of accidents of subcontractors in total, while performing work for the sake of the company - 19,
   - The number of fatal, collective, serious accidents of subcontractors -1.
2. Rates of trainings as for occupational health and safety and risk control (A8).
   - The number of persons trained in the principles of providing the first aid – 915,
   - The number of persons trained in transporting hazardous goods – 194,
   - The number of persons trained in the Fatality Prevention Standards – 1454 of the company's employees and 60 persons from the external companies (practical tasks).
3. Rates of occupational health and safety specified in formal arrangements concluded with trade unions (LA9)
   - The number of trade unions representing employees – 32,
   - The number of in-plant trade union organisations - 18 (the group subject to the Corporate Collective Labour Agreement),
   - Four meetings regarding OHS with the participation of the Main OHS Committee , the company's President, HR representatives, - Social Dialogue and 7 trade unions representatives.

In order to confirm the adopted hypothesis: whether the published indicators are the result of actual implementation of occupational health and safety management strategy or whether they are only part of building the image and good name of the company socially responsible; the analysis of the results of actions was conducted for a longer period.

On the basis of the data of the reports on the state of the occupational safety the number of accidents recorded in the enterprise over the years of 2014-2013 (details in diagram 1)

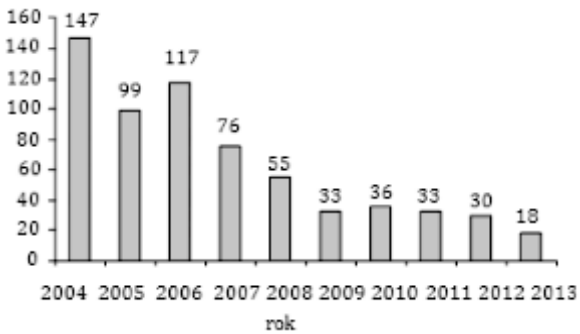

Diagram 1. Number of accidents in ArcelorMittal Poland over the years 2004-2013
Wykres 1. Liczba wypadków w ArcelorMittal Poland w latach 2004-2013
Source: developed on the basis of the SR reports ArcelorMittal Poland

As the data presented in Diagram 1 show the number of accidents fell from the level of 147 recorded in 2004 to 18 recorded in 2013.

The Occupational Health and Safety management system in the analysed enterprise was introduced in a complex way in 2008. Over the years 2008-2013 the fall in rates of injury frequency (the *number of accidents with work disruption* x *1000000/a number of hours worked*) and in the rates of injury frequency (the number of sickness days x 1000/number of hours worked (diagram 2) was recorded.

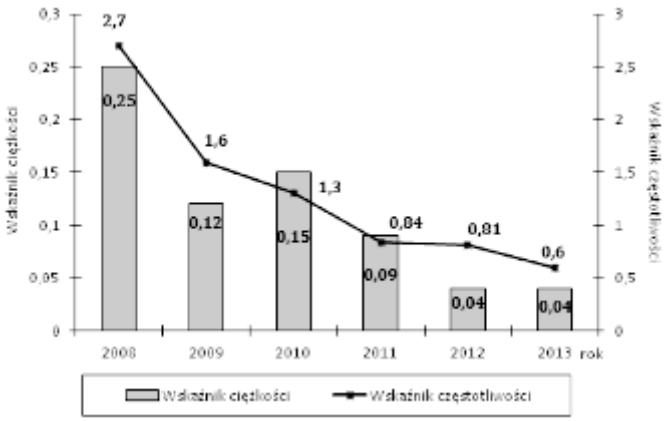

Diagram 2. Frequency and seriousness of the accidents in ArcelorMittal Poland over the years 2008-2013
Wykres 2. Częstotliwość i ciężkość wypadków w ArcelorMittal Poland w latach 2008-2013

Analysing the levels of indicators (diagram 2) and the number of accidents (diagram 1) one can confirm the justifiability of research hypothesis that actions taken give the measurable results. An indicator of success for the programmes of improving occupational safety is the fall in the number of accidents from 129 in 2013 compared to the accident rate recorded in 2004 and the decrease in the rates of: frequency by 2.1 in 2013 compared to the year 2008, seriousness by 0.21 in the analogous comparison.

Additionally, in order to support the justifiability of the accepted thesis that the actions taken for occupational safety give measureable results, the review, chronological set of the activities performed in the enterprise ArcelorMittal Poland has been developed .

List of actions:

1. Ordering the organisational structure of the enterprise.
   In 2007 the centralisation of services for occupational safety took place in the enterprise. Up to 2006 particular services were subordinated to directors of plants comprising the enterprise. Subordination of the services of occupational safety to the General Director was subject to the execution of item 5 of the Resolution of the Council of Ministers concerning occupational health and safety services „occupational health and safety services directly report to the employer".
2. OHS trainings.
   The subject of occupational safety comprised 50% of all the trainings conducted in the enterprise, these are both obligatory trainings subject to the provisions of Chapter VIII of the tenth section of the Labour Code, as well as additional ones.

3. Managing awareness of safe work.
   The standards of occupational safety, which are binding in the enterprise, have been developed. In 2007 the enterprise joined the pilot programme of awareness management.
4. *Safety Day*.
   Celebrated every year, since 2007.
5. Policy of Health and Safety.
   In 2008 the board of the enterprise published a consolidated policy for occupational health and safety. The decalogue of procedures for the management staff and the employees as for occupational safety was specified.
6. Engaging employees.
   In 2008 the so-called ideas boxes – safe work were installed in the enterprise and the particular departments. The employees could initiate ways to improve the work organisation and the working conditions.
7. Integrated management system.
   In September 2010 the occupational health and safety management system according to the Polish standard 18001:2004 and the British OHSAS 18001:2007 (the corporate requirement) was integrated with the quality management system (ISO 9001:2008) and the environmental management system (ISO 14001:2004).
8. Strategic approach to health and safety.
   The enterprise adopted a strategic approach to occupational safety improvement. In the strategic assumptions for the year 2011 occupational safety became a priority purpose. The slogan 3 S was adopted: safe, sustainable steel [production]. The enterprise aim – no accidents.
9. Monitoring system and working conditions improvement system.
   The enterprise periodically conducts safety audits and check-ups.
10. Improving occupational health and safety management system.

The OHS teams, internal watchdogs for compliance with safety standards, work in the enterprise. Each employee is liable to react to irregularities (situations which can lead to an accident). The enterprise applies the so-called Bradley Curve which shows a number of accidents in time according to four levels (the higher the level, more the employees feel responsible for safety).

The presented scope of activities is illustrative, showing the way of the enterprise to get measurable results as for occupational health and safety. The reporting itself is not sufficient to assume that the enterprise takes actions to improve working conditions or employees' health and life protection. In the specified case study the information with the GRI indicators is too general to give the picture of an enterprise responsible for safety. The annual structure of reports does not allow to apply comparative analyses. The suggested GRI (g4) indicators are meaningful only if the enterprises applied a homogenous structure of indicators for a longer period of time to have a summary of change dynamics.

Otherwise, the receiver of the information included in the social reports gets exclusively raw data. According to the GRI (G4) recommendations , the companies should also include negative activities in the reports , e.g. the number of employees who were paid compensations for work accidents.

Summing up, in CRR for occupational safety it is necessary to:

- Unify the graphic design of the annually published reports,
- Apply the GRI indicators in a comparative approach, e.g. reference to the previous year,
- Descriptive information should be compatible with the assumed assessment indicators , e.g. providing the number of trainings (hours for 1 employee) by sex, add information on the subject of the trainings, forms of trainings, as well as information whether they are obligatory or additional,
- Make a list of both positive indicators and as well as negative ones, showing corrective measures.

5. Summary

In this article the position of corporate responsibility reporting for employees' health and safety in the general structure of SR reports has been shown. In the practical part the path of the enterprise to execute the policy of improving occupational safety was followed. The specified stages can be an example for other companies, joining the occupational health and safety management system. The quantification of occupational safety included in the article can be useful when developing a scorecard for the company for OHS.

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