

CHALLENGES IN THE APPLICATION OF THE LAW ON SAFETY AT WORK IN FBiH

Miliša Todorović

Tim Protekt doo

Stara Pazova, Republic of Serbia

Asmir Helvida

ArceloMittal

Zenica, B&H

Snežana Živković

University of Niš, Faculty of Occupational Safety

Niš, Republic of Serbia

Keywords: safety at work, prevention, safety culture

ABSTRACT

Occupational safety is a very important factor in the process of creating a safe work environment. The benefits employers, employees and even the state as a whole can reap greatly depend on the way occupational safety is organized and implemented. This paper aims to make a general analysis of the condition of safety at work in Bosnia and Herzegovina, with a special emphasis on the Federation of Bosnia and Herzegovina. The starting point of this paper is the fact that the current law on occupational safety was passed less than two years ago and certain doubts are sprouting up regarding its implementation. This is why there is a need for a deeper and more comprehensive analysis of existing legal situations, problems in implementation, and proposals that could improve or otherwise prove helpful in gaining a clearer understanding of the rights, obligations, and responsibilities of all parties involved, those being the state, employers, and employees. The initial hypothesis of the paper is that the current law on occupational safety, with all its vagueness, represents a good basis for improving the position and rights of employees. The descriptive method was used in the paper, along with a study of available literature, both domestic and foreign.

1. INTRODUCTION

Occupational safety is a very important area of social life. Man has always aspired to perform his activities in a way that will enable him to be safe. Injuries at work are determined by the imbalance between unfavourable work conditions and an insufficient understanding of occupational safety and health, by both employers and workers. Unfavourable working conditions include a wide range of biological, mechanical, and physical exposures to the environment, psychological demands related to specific tasks, the overall working environment, issues related to the handling and use of materials, tools, and machines, organizational factors, as well as pressure from the management to achieve the outlined plans and production targets [1]. Occupational safety can be defined as a set of technical, legal, psychological, pedagogical, health-related, and other activities and measures that identify hazards and harms and define steps that should prevent or reduce the possibility of injury at work. As we can see, the emphasis is placed on creating working conditions in which work-related injuries are completely prevented, or at least the possibility of them occurring is greatly reduced. The Statistical Office of European

Communities (Eurostat) states that in the EU, close to 3% of employed persons experienced an injury at work that caused an absence longer than three days, adding up to around 83 million calendar days of sick leave [2]. During the evolution of human society, safety at work went through different phases. In its initial phase, it did not have any special significance due to the social organization, the role of the state, and the development of the workforce. Over time, with the increasingly active involvement of the state in the relationship between the employee and the employer, the role and importance of occupational safety are gradually changing.

The very realization that injuries at work create huge expenses that have a negative impact on all aforementioned parties is reason enough for a more significant role of occupational safety. In that sense, drafting and harmonizing normative acts in the field of occupational safety is a necessary condition [3]. The economy of every country faces numerous changes every day. We are witnesses to countless accidents these days (from wars to earthquakes) which greatly complicate the functioning of business organizations. Changes are an integral part of the daily activities of all organizations and it is not an unknown fact that nowadays organizations have to work hard to stay afloat [4]. In such an environment, serious organizations are increasingly devoting themselves to getting a clearer understanding of costs as an opportunity to increase comparative advantages in the global market competition. During the determination of the types and overall scope of the costs, an increasing number of employers come to know that the share of costs that arise as an integral part of injuries at work represents a significant amount of money. A large number of studies indicate that the costs incurred as a result of injuries at work are at the level of 4% of the GDP of every national economy [5]. This information speaks for itself. What is problematic about this data is the fact that only 1% of that cost is visible and refers to the direct costs of an injury at work. What about the other costs, those which are not visible to that extent? How aware are the employers of their existence and their size? The very realization that a problem exists is good because it opens up opportunities to define activities that should help us reach an appropriate solution. The basis for looking at problems and coming up with solutions is the need to adopt certain legal acts and by-laws, change the safety culture, promote the role of safety at work in the process of creating benefits for all members of society, determine these benefits through a responsible policy and implementation of appropriate measures for safety at work. These are some of the questions we plan to deal with in our paper, with the intent to make a kind of cross-section that could serve as the starting point for further activities in the process of creating safe working conditions. In the first part of the paper, we will emphasize occupational safety itself, how it was created, what it used to be, what it is now, and what it should be in the future. Is the adoption of the Law on Occupational Safety the solution to all problems or should it only be a starting point for further activities? As much as the Law itself is the solution to all the problems, if there are no by-laws that should enable the implementation, the Law itself won't change anything. Who educates our occupational safety and fire protection engineers and do we have enough engineers from those fields who, through their activities, should contribute to the creation of a safer work environment?

What is our safety culture like and how do we think it can be changed? What is the role of every occupational safety and fire protection engineer in the process of changing the awareness of each individual about their role and importance in the process of creating a safe work environment? These are some of the questions we will try to answer in this paper. It is fact that there are no simple solutions and that every reader of this paper can observe these questions and dilemmas from a different angle. Different points of view and constructive thinking are always welcome in the process of acquiring valid views and conclusions which should change our perception of the role of each one of us in the process

of creating a better tomorrow. Finally, it is important to state that safety at work is not an ad hoc activity. To achieve appropriate conditions, constant improvement and development of the occupational safety organization are necessary. The organization of occupational safety refers to the entire system of measures undertaken with the aim of preventing and eliminating potential hazards that threaten the lives and health of employees. There are subjective and objective factors that cause hazards and injuries at work. Subjective factors are non-compliance with occupational safety regulations, deliberate use of protective equipment, insufficient expertise to perform work, psychological state of the worker, etc. Objective factors are means of production, which, through improvement, acquire technical and functional properties so that they become lesser threats to a worker's physical personality [6].

2. LEGAL BASIS

If we go back many years and centuries, numerous documents and objects show that the field of safety and health at work has always been present in social life. In some periods, its importance was greater than in others. Regardless of what period we are talking about, the position of workers improved over time. In the first phase, it was through the gradual organization of work in such a way that human power is consumed less and less and replaced wherever possible. The next phase is characterized by the production of tools for work, which, with their constructive characteristics, reduce the possibility of injuries at work. The third period refers to the gradual inclusion of all the elements of an organization in creating the safest possible working conditions. In this sense, certain normative activities have appeared throughout history, developed over time, and, through certain legal acts and by-laws, attempted to create working conditions in which there will be as few injuries at work as possible. Most of the countries around us have adopted new laws that regulate the field of occupational safety and health, and they are largely harmonized with normative acts of the European Union, which all countries of the region aspire to. The law defines this field, and numerous by-laws (rules, decrees et cet.) define all economic areas in a more precise way [7]. When we talk about the legal basis, it is important to mention at the very beginning that we truly need legal acts and by-laws that will clearly define the rights and obligations of employers and employees.

Generally speaking, most non-EU countries have already adopted Occupational Safety Laws that are harmonized with the norms of the European Union (Bosna and Hercegovina, Montenegro, Republic of Serbia). Observing the development of social relations through history, we can conclude that at a certain level of development, there is a need to define certain legal regulations that will regulate these relations [8]. Because of all this, it is necessary to work much more on the organizational culture of the workers as the process which creates the assumptions of appropriate safety culture as a road to avoiding injuries at work. The Federation of Bosnia and Herzegovina, as a part of Bosnia and Herzegovina, finally adopted the Occupational Safety and Health Act at the end of 2020, which would deal with the issue of occupational safety and create better and safer working conditions for employees. Until the adoption of this law, we had an absurd situation where the fines for non-compliance with the provisions of the existing Law on Occupational Safety were in 'Yugoslav dinars'.

A little earlier in the Brčko District and the Republic of Srpska, laws that deal with the issue of occupational safety and health were passed. In the Republic of Srpska, there is a Law on Occupational Safety and Health from 2008 (Official Gazette of the Republic of Srpska No. 01/2008 and 13/10), and in the Brčko District, the Law on Occupational Safety and Health from 2013. Both of these legal acts are harmonized with the European directive 89/391 which represents the foundation for regulating the field of safety at work.

Over the course of the paper, we will shift the focus of our analysis to the existing legal solution in the Federation of Bosnia and Herzegovina. However, before that, we have to give a general overview of existing legal acts that regulate the field of safety at work in the whole of Bosnia and Herzegovina as well as its immediate surroundings. The general impression is that the adopted Laws on Occupational Safety are harmonized with the EU directive dealing with these issues. What is an important prerequisite for the implementation of existing legal solutions? By-laws. What is our situation when we talk about by-laws? The very insight into the by-laws that regulate certain economic activities unequivocally raises the question of their compatibility with the times in which we live. A large number of by-laws are from the last century and the question is to what extent they can be adjusted to today's degree of economic growth and development. ((for example, in the FBiH we have General rulebook on hygienic and technical protective measures at work ("Official Gazette of FNRJ", no. 16/47, 18/47 and 36/50) and Rulebook on occupational safety when loading cargo into motor vehicles and unloading cargo from such vehicles ("Official Gazette of the SFRY", number 17/66)). The current issue is not only related to Bosnia and Herzegovina, because for example, in the Republic of Serbia, which passed the Law on Safety and Health at Work in 2005, the Rulebook on Occupational Safety in Agriculture is also still in force ("Official Gazette of the SFRY, no. 34/68). What means of plant protection were used then, and what is used now? We are not sure that the solutions from 60 years ago are appropriate. The problem with the Federal part of Bosnia and Herzegovina is only more pronounced because, until recently, there was no Law on Occupational Safety that could be applied in the right way, so it is clear that the by-laws are also not appropriate.

An integral part of the activities that await us is the continuous harmonization of legal regulations with the norms of the European Union. The development of techniques and technology, new knowledge, and experiences, lead to the creation of new regulations in the field of occupational safety. The problem arises at the moment when we start harmonizing, and our economic and social development is not at the appropriate level. For example, in the Republic of Serbia, the Rulebook on preventive measures for safe and healthy work when using equipment for working with a screen ("Official Gazette of RS", no. 106/09 and 93/13, 86/19) in the article 3 and 6 is defined that every worker who works for more than 4 hours in front of a computer has the right and obligation to perform an ophthalmological examination every 3 years. Many dilemmas arise in the implementation of this Rulebook. One of them refers to the clarification of the concept of working with a screen (view focused on the monitor) or working in front of the screen where the worker's view is not focused on the monitor all the time. Another, perhaps bigger problem in our opinion, concerns the purpose of this medical examination and the essence of protection at work. A simplified interpretation says that the worker undergoes a medical examination and during that examination, the dioptre in both eyes is determined to be -1. After three years, the dioptre increases to -3 and after 6 years, the dioptre is -5. What does an ophthalmological examination mean to us in that state? Is the essence of occupational health and safety to deal with prevention, or to manage the worker's new state through observing the declining results? Is the medical examination the main aspect of occupational safety or is it tackling the causes of visual impairment in workers? Are the workers properly trained to operate with the screen? Have the adjustments of the resolution and the importance of the refraction of natural and artificial light on the monitor been explained to the workers? Are there regular examinations of the lighting in the room (and not just once every 3 years per applicable regulations)? The main goal of occupational safety is dealing with the causes and not the consequences. We now face an important question: Is the law a necessary and

sufficient condition to create an environment in which the number of injuries at work would be reduced and working conditions would be improved.

Considering the novelty of the current Occupational Safety and Health Act in the Federation of Bosnia and Herzegovina, it is difficult for us to extract any relevant facts. On the other hand, the superficial analysis of the trend of injuries at work in the countries in the immediate vicinity of Bosnia and Herzegovina shows that there is no clear trend of reducing the numbers and severity of injuries at work (example, If we look at the annual reports of the labour inspector in the Republic of Serbia, we cannot see a trend of decreasing the number and severity of injuries at work). Why? It is difficult to give a simple answer to this question because a simple observation of some statistical data can lead us astray. What we can state with certainty is the fact that the development of techniques and technology leads toward the creation of safer tools and on that side one SHOULD see the trend of reducing the number of injuries at work. If we do not see it already, it is clear that we need to turn our attention to the worker who controls these tools for work. What is the worker's role in the process of creating a safe work environment and is their position about who should take care of safety at work actually the answer to all dilemmas?

The question of safety culture is very important, and until we deal with the problem of safety at work through the prism of values that determine that workers behave a certain way during the performance of defined work operations, we can hardly expect better statistics when we talk about the number and severity of injuries at work. Individual analyses of numerous cases of major accidents have established that safety culture has a very large impact on the creation of a safe work environment. It is a known fact that culture is very difficult and slow to change. That is why we must recognize it as a very important factor that affects the increase of business competencies of every organization and actively manage its growth and development. An appropriate safety culture creates the basic prerequisites for the long-term productivity of both employers and workers, as well as the state itself. On the other hand, it creates conditions for a safer environment for workers [9]. Since we are already talking about normative frameworks for improving working conditions, it is important to mention that we should think about starting the procedure for mandatory occupational injury insurance as soon as possible. In developed countries, this law is very often the main motivator for the employer to organize occupational safety affairs in such a way that no injuries occur at work. Every year, the insurance company agent, depending on the number of injuries and paid compensation claims, increases or decreases the value of the policy for each worker. This fact is very often a decisive motive for employers when we talk about taking care of workers' health.

3. CHALLENGES IN THE APPLICATION OF THE CURRENT LAW ON OCCUPATIONAL SAFETY IN THE FEDERATION OF BOSNIA AND HERZEGOVINA

Before we look back on the good, as well as solutions that could be improved upon, we have to state one important fact. The Law on Occupational Safety which was in force before this law was inapplicable for many reasons. The very fact that the fines were expressed in Yugoslav dinars speaks to the extent to which punitive measures could be the stimulus for the implementation of this law. We know very well that in the regions where we live, punitive measures are still the main incentive and that unless some sanctions are defined, a large number of employers will not deal with this problem. Because of all of this, we must praise the relevant ministries and other institutions that, within the framework of their activities, contributed to the adoption of the Occupational Safety and Health Act and that it represents the basis that should help us create safer working conditions for all workers. In all countries in the immediate vicinity, there have been several changes to the basic laws of

occupational safety that were adopted based on the EU directive 89/391, and this is nothing new. Practice is very often a control measure, and during the life of the law, good things and the things that need to be changed are seen in practice.

In Article 12 in paragraph 1 and 2 of the Occupational Safety and Health Act, the legislator predicted that each employer must prepare an Elaborate on the arrangement of the workplace for the activities defined in the act itself. In Article 12 in paragraph 2 of the Occupational Safety and Health Act If the work is carried out for more than seven days, the employer is obliged to report to the competent inspection body. What is the problem with the practice? What about reporting works that last less than seven days? In the case when the employer performs work activities at a certain location for a long time, they organize the construction site following all requirements. When work activities are carried out in one or two days, many improvisations are made in practice because it is “not worth it” to spend time preparing for a construction site. In such conditions, injuries at work often occur. We think that wherever there is an opportunity, employers who annually perform some activities that last less than 7 days (various activities for the maintenance of certain systems) should report through the general notification of works that in that year, in a certain area, they perform for the users of their service specific maintenance work. In addition, the law does not recognize the institution of continuity of work maintenance.

Someone can show up at the construction site and, due to the dynamics of the work, complete the work intermittently in shorter or longer time periods. (a company that performs the rough distribution of electrical installations and then comes to the final connection of the equipment) How do we then interpret that time limit “that if one performs work for longer than seven days”, one must report the work? The law itself does not provide the possibility that the Application of Works and the Elaborate on the arrangement of the work site can be submitted to the competent state authorities in writing. Then the competent inspectors, in the office preparation of the examination of the work site, can familiarize themselves with the location, specific dangers and damages, the equipment used to perform the works, and the like. In Article 13 of the Occupational Safety and Health Act defines that the main contractor or investor should provide a unitary report on the organization of the work site. What do we do in a situation where an investor is a natural person who hires a construction company to construct a building? As a natural person, the investor does not know how to prepare such a document. On the other hand, if the investor hires a construction company, it can handle such preparations. However, in practice, construction companies often specialize in some types of work and hire subcontractors for others. How can someone, who deals with the execution of rough construction works, define the measures of safety at work, e.g., during the execution of sub-laying works? The usual solution is for each company to make its own Elaborate, which refers to their works and safety measures. Through the Agreement on mutual regulation of safety measures at work, the execution of the works is organized in such a way as to prevent mutual injuries of workers.

Article 26.3 of the Law defines that the employer may use hazardous substances only if they can't achieve the same work results by using harmless substances. The sequence of measures that every employer who uses hazardous substances should follow is defined in the rest of the articles. Some of these measures can be applied in the technological work process. However, a big problem occurs in situations where there is no permanent activity with dangerous substances and when neither the employer nor the employees, and often not even persons responsible for occupational health and safety, are aware of the potential consequences. In that sense, there are excellent normative solutions that foresee a system of permits for dangerous jobs, whether working at height, depth, or with dangerous substances. The person responsible for occupational health and safety is obliged to go to

the site, inspect the location, and only if all the conditions are met, give consent for that type of work. It is still a matter of good practice and not a legal obligation

In the continuation of the Law, the rights, obligations, and responsibilities of the person in charge of occupational safety and health are clearly defined. In addition, the employer's obligation to organize and train a certain number of workers to provide first aid and fire protection is also clearly defined. We would especially single out the clearly defined obligation of employers that every worker can and must receive work instructions in a language they can understand.

It is also interesting how the employer's obligation to appoint a trustee for occupational safety and health is defined (In Article 44 and 45 Law of the Occupational Safety and Health). In a large number of legal solutions, this obligation is left as an opportunity for the employee, but not as an obligation of the employer. In the continuation of the study of the law, we can clearly see the rights, obligations, and responsibilities of the workers as well as the rights concerning health supervision. An interesting solution exists in a part of the law that concerns the rights of workers in a situation where they work at a workplace with an increased risk, and after some time, it is determined they are no longer capable of working at that workplace.

The employer is obliged to transfer the worker to another workplace that matches his health capabilities if such a workplace exists. If such a place doesn't exist, the relevant provisions of the Occupational Safety and Health Act apply. Someone who had worked for 30 years at a workplace with an increased risk (e.g., working at great heights) can no longer pass a medical examination due to the inability to work at those heights. What kind of a job can they expect on the labor market? When we are talking about reporting injuries at work, is it clearly defined that every serious or fatal injury should be immediately reported to the Labor Inspectorate? Are we able to determine for each work injury whether it is serious or minor? What happens when we are wrong and the injury we characterized as minor turns into a serious injury? Does the person responsible for occupational safety and health bear any consequences?

In the continuation of the paper, we focused on the study of certain by-laws without which there is no application of the law itself. The Rules of risk assessment (Official Gazette of the Federation of Bosnia and Herzegovina 23/2021) represent a very important document without which there is no application of the law itself. Unfortunately, the Occupational Safety and Health Act was passed in November 2020 and it clearly defined the deadline by which employers should harmonize their operations with the law. This was impossible until the adoption of these Rules on risk assessment and a few other by-laws.

The next document that we will briefly analyze is the Rulebook on methods, procedures, and deadlines for periodic inspections and tests in the field of safety at work (Official Gazette of Federation of Bosnia and Herzegovina no. 23-21). The mentioned document gives clear guidelines on the deadlines and in what way the employer must inspect the installations, equipment, and the conditions of the working environment. What could be potentially problematic concerns the obligation of employers to test the conditions of the working environment, in summer and winter, every three years. In doing so, it is emphasized that summer tests should be organized in the period between April and September, and that winter tests can be done in the period between October and March. In the time of climate change, we have witnessed that in the last few years temperatures measured in November and December were above all usual values. By fulfilling the employer's obligations for testing the conditions of the working environment in October, when the outside temperature is over 15 °C, the employer came to the information that the measured temperatures are within the limits the law defines as allowed. However, would those values be like that if the outside temperature was -5 °C? Some of the solutions in the

neighboring countries (e.g., the Republic of Serbia, article 11 paragraph 3, Rulebook on the procedure for inspecting and checking work equipment and testing working environment conditions ("Official Gazette of RS", No. 15/2023) define that winter tests are organized when the outside temperature is below 5 °C, and the summer tests are to be done when the outside temperature is above 15 °C. In addition, through legal acts and by-laws, it is clearly defined that certified organizations are required to examine working conditions: lighting, microclimate, noise, and chemical and biological hazards while preparing the risk assessment act. That is all logical if the technological work process indicates the existence of all the mentioned hazards. However, the testing of chemical, physical and biological hazards in the company engaged in software development or any other administrative activity is problematic. The employer is obliged to pay a certain amount for tests of harmfulness that are certainly not present in the work process. In that way, the price of the service of creating a risk assessment report increases. Taking into account the time we live in and the serious difficulties in the economy, we think that with this attitude we are creating a certain amount of revolt and dissatisfaction among employers when it comes to the Occupational Safety and Health Act itself. At the end of this discussion, we would like to give a brief overview of another by-law, the Rulebook on the conditions of performing business (Official Gazette of Federation of Bosnia and Herzegovina No. 23-21). For the implementation of the obligations stipulated by the law, this is an important by-law.

To begin with, this Rulebook defines the professional qualification, work experience, and the number of workers one requires in order to be authorized to carry out defined activities with employers. The rulebook defines that the tasks referred to in Article 8 Rulebook on the conditions of performing business can be performed by an authorized organization that has at least three employees with a higher professional qualification- VII degree or higher education of the first cycle of the Bologna system of study (which is evaluated with at least 180, i. e. 240 ETCS points), namely: a) one graduate chemical engineer or graduate engineer of chemical technology or graduate technologist or a bachelor of chemistry or bachelor engineer of chemical engineering and technology, b) one graduate biologist or graduate engineer of medical-laboratory diagnostics or a bachelor of biology (major: biochemistry and physiology, microbiology, teaching), c) one graduate of chemical engineering or graduate engineer of chemical technology or graduate technologist or graduate biologist or graduate occupational safety engineer or graduate physics engineer or bachelor of chemistry or bachelor engineer of chemical engineering and technology or bachelor of biology (major: biochemistry and physiology, microbiology, teaching) or bachelor engineer of occupational safety or bachelor of physics. Do we have a sufficient number of trained staff for these jobs who have three years of work experience in the profession in the Federation of Bosnia and Herzegovina? I think we all know the answer to this question. In addition, each authorized organization must have all the equipment and a suitable laboratory for testing the conditions of the working environment. Authorized organizations have to hire significant resources at the very beginning to start dealing with the work for which they have been authorized. Due to such large expenses, the price of services is significantly higher. Of course, the employer is the one who ultimately pays the bill. Should we make the process of compliance with the legal solutions easier or harder for the employer? In our opinion, we only make it more difficult like this. A special issue is the number of authorized organizations and their ability to complete documentation for each legal entity in the Federation of Bosnia and Herzegovina. By looking at the occupational health and safety register on the website of the Federal Ministry of Labor and Social Policy Federation Bosnia and Herzegovina, it can be seen that only 34 organizations have authorization for these jobs. In some neighbouring countries (Republic of Serbia), in the initial years of application of the law, there were no such string conditions for the

registration of authorized organizations. Each company did not have to be registered for testing the conditions of the working environment, but hired special organizations which were licensed for those jobs. The next legal solution, ten years after the first version of the law, started to be a little stricter regarding the number of employees at those companies and their professional qualifications. However, each company had 10 years to find an authorized company to produce the necessary documentation. The Rulebook on the conditions of performing business (Official Gazette of Federation of Bosnia and Herzegovina No. 23-21) in article 11 define that authorized organization must have an occupational health specialist as part of the risk assessment team Insisting that each authorized company has a contract with an occupational medicine specialist is also a separate issue. How many doctors in that specialty do we have in the Federation of Bosnia and Herzegovina? Does this path create an environment in which a relatively small number of organizations receive authorizations, which as a consequence has a certain increase in the price of services? What we would also like to mention concerns the need to create a register of work injuries at the level of the Federation of Bosnia and Herzegovina. In the time of the development of informational technologies, it is necessary to think about the information of a software database in which the data on injuries at work would be automatically entered. Through the analysis of such a database, we could have insight into more detailed information about injuries at work, jobs in which they most often occur, who gets injured- younger or older workers, at what time of the day, what are the causes and what are sources of injuries at work and similarly. The new version of the Law on Safety and Health at Work, which is being prepared in the Republic of Serbia, defines the obligation to create such a register. After the formation of the database, we should deal with determining the causes of injuries at work. In order to solve any problem, it is important to clearly define the problem itself. But how can we define a problem if we do not have relevant data that could allow us to take a clear stand? An effective solution to the problem is a specific measure or a set of measures that eliminate or reduce the influence of one or more causes found on the cause-and-effect graph (for this reason, the cause becomes the “main/root” cause). The approach for creating effective measures includes the following: generating possible solutions, evaluating solutions, and selecting the best solutions [10].

4. CONCLUSION

To conclude, just a brief statement that the aforementioned legal solutions represent a good basis for creating conditions for safer work. We have to start with the fact that the mentioned legal solutions represent a significant step forward compared to the previous which weren't applicable. Does this mean that the listed solutions are ideal? Of course not. Occupational safety is a job that happens continuously and many developed countries change their laws due to the changes in technology and work technology itself. The Faculty of Metallurgy in Zenica, as a higher educational institution that organizes and implements the study program of occupational safety and fire protection, has a great role and responsibility in the process of training professional staff who, through their activities, will in the coming time be an active participant in the process of improving working conditions.

5. REFERENCES

- [1] Chau, N., Gauchard, G., Dehaene, D., Benamghar, L., Touron, C., Perrin, P., & Mur, J. Contributions of occupational hazards and human factors in occupational injuries and their associations with job, age, and type of injuries in railway workers. *International Archives of Occupational and Environmental Health*, Vol. 80, No.6, pp. 517-525, 2007
- [2] Eurostat (Health and safety at work in Europe (1999-2007) - A statistical portrait. Available: <http://ec.europa.eu/eurostat/documents/3217494/5718905/KS-31-09-290-EN.PDF/88eef9f7-c229-40de-b1cd-43126bc4a946> (Accessed on 4 March 2018), 2010

- [3] Todorović, M., Živković, S., Haznadarević, L.,: Managing projects in the field of environment and life quality, XIII. Znanstveno-stručna konferencija s međunarodnim sudjelovanjem „Manadžment i sigurnost“, Čakovec, Hrvatska, Zbornik radova, str. 295-308. ISBN 978-953-55241-6-8 UDK 005:331.4(063) UDK/UDC, 005.73:331.45, 2018.
- [4] Živković, S., Todorović, M., Markič, M.: Komparativna analiza uticaja organizacione kulture na sistem bezbednosti i zdravlja na radu u poslovnim organizacijama u Sloveniji i u privrednim društvima u Srbiji, VI. Znanstveno-stručna konferencija s međunarodnim sudjelovanjem „Manadžment i sigurnost“, Čakovec, Hrvatska, Zbornik radova, str. 120-128. ISBN 978-953-55241-6-8 UDK 005:331.4(063) UDK/UDC 005.73:331.45(497.11) (497.4), 2011.
- [5] Živković, S., Todorović, M., Markič, M.: Komparativna analiza uticaja organizacione kulture na sistem bezbednosti i zdravlja na radu u poslovnim organizacijama u Sloveniji i u privrednim društvima u Srbiji, VI. Znanstveno-stručna konferencija s međunarodnim sudjelovanjem „Manadžment i sigurnost“, Čakovec, Hrvatska, Zbornik radova, str. 120-128. ISBN 978-953-55241-6-8 UDK 005:331.4(063) UDK/UDC 005.73:331.45(497.11) (497.4), 2011.
- [6] Todorović, M. Značaj organizacije rada u cilju smanjenja broja i težine povreda na radu, Zbornik radova Nacionalne konferencije sa međunarodnim učešćem 50 godina organizovane zaštite na radu u Srbiji, Niš, str.313-320, 2010.
- [7] Todorović, M., Živković, S. Organizational culture in the function of occupational health care at work, International conference - Life cycle engineering and management ICDQM - 2010, Proceedings, 155-161, 2010.
- [8] Todorović, M., Živković, S., Spremo, G.: Uloga države u procesu stvaranja bezbednih uslova za rad, 17. Međunarodna konferencija „Upravljanje kvalitetom i pouzdanošću“ICDQM-2014, Beograd, Zbornik radova, str. 416-421. ISBN 978-86-86355-16-4 COBISS.SR-ID 207635724 CIP 005.6(082) 005.6:658.58(082) 62(082), 2014.
- [9] Todorović, M., Živković, S.: Analysis of occupational injuries in the Republic, JEL classification: J28, UDC 613.6(497.11); ISBN: 978-86-6139-138-5, Faculty of Economics Nis, 2017
- [10] Helvida, A., Hadžić, S., Todorović, M.: Uviđaj incidenata i utvrđivanje korjenitih uzroka, XVI. Međunarodna konferencija za bezbednost i zdravlje na radu, Makedonija, Zbornik radova, str. 151-159. ISBN 978-608-244-658-5, COBISS.MK-ID 111274762, cip 331-45/.48(082), 2019.