

# **MODERN CHALLENGES TO THE HEALTH AND SAFETY AT WORK IN BULGARIA**

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## **1. Introduction**

The subject of occupational safety and health (OSH) is particularly topical today, at the beginning of the XXIst century. The attention paid by society to the provision of safe and healthy working conditions is increasing under the influence of trade unions, international and national organizations. Under conditions of demographic collapse in this country, from the viewpoint of the economy it is important to preserve the health and working capacity of human resources for as long as possible. Equally important are also the social consequences of violating the OSH.

The aim that has been set in the article is to clarify the organization of OSH activities in the Republic of Bulgaria, to point out the main present-day challenges facing it and the possibilities for their solution.

## **2. Organization of occupational safety and health activities in Bulgaria**

OSH activities in Bulgaria have a long history. As far back as 1905 the Bulgarian Kingdom passed a law, which marked the beginning of labour legislation and in actual fact the beginning of OSH activities in Bulgaria – The Law for the Protection of Female and Child Labour. “During the various periods in the development of the country the state policy on occupational safety and health has been amazingly consistent. Irrespective of the social and political organization of the state, its politicians and rulers have been aware of the importance of the problems and have paid the needed attention to the normative base and the management of activities in this area.” [1, p.30].

Bulgaria’s membership in different international organizations has played a significant role in the formation of the contemporary OSH system. Without going into detail, we will note the country’s membership in the International Labour Organization (ILO) since 1920, the United Nations (UN) since 1955, the Council of Europe (CoE) since 1992 and the European Union (EU) since 2007.

The pursuance of a purposeful social policy for the provision of OSH is a diverse and complex process, connected with the implementation of a combination of legislative, organizational and economic, social, technical and health measures. The priorities in this area are aimed at protecting the health, the capacity for work and the life of working people. For their implementation there are envisaged concurrent actions in different directions – the improvement of labour legislation, the building of competent institutions, the provision of an information base, the optimization of the conditions of life and labour, training, the building of the culture of prevention, etc.

The development of OSH activities in Bulgaria follows the main guidelines and principles of European and International law on: avoidance of risks; assessment of risks that cannot be avoided; restriction of risks at their source; the marking of existing hazards and sources of factors detrimental to the health and safety; the pursuance of a coherent comprehensive policy of prevention covering the technology, the organization of work, the working conditions, social relations and the influence of the elements of the working environment and the working process; the use of collective means for protection taking precedence over personal protective equipment; the provision of relevant instructions to the workers, etc.

Republic of Bulgaria possesses a rich normative base for the realization of OSH activities. By the end of 2012 the effective normative acts numbered over 700 [2, p.50], but among those of greatest importance are the Labour Code [3] and The Law on Health and Safety at Work (LHSW), in which

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19 relevant acts of EU legislation are pointed out [4]. LHSW specifies the principal rights, duties and responsibilities of all participants in the labour process: the state, the employers, the employed, the individuals who work alone – at their own expense, or in partnership, as well as of other organizations and legal entities. The developed system of standards, specific requirements and duties for ensuring occupational safety and health creates a practical foundation for the realization of the principles of OSH. The minimum requirements, which employers must comply with in order to ensure the safety and health of their workers and staff have been set. Professional hazards are assessed and planned. The provision of medical observation of workers and administrative personnel, as well as the provision of the necessary information and appropriate training, consistent with the nature of the work being done and the qualification of the employed are compulsory. Workers and administrative staff are required to take out industrial accident insurance.

The state policy in the area of OSH in Republic of Bulgaria is determined by the Council of Ministers (CoM). The development, coordination and pursuance of the state policy for ensuring occupational safety and health is carried out by the Ministry of Labour and Social Policy (MLSP). Since 1998 with the MLSP has been functioning the National Council on Working Conditions (NCWC) and the fund Working Conditions has been established. There has been adopted a Strategy on Safety and Health for the period 2008–2012, a document, through which the government of Republic of Bulgaria outlines its vision in the area of safe and healthy working conditions. For the purposes of the realization of the strategy, since 2009 MLSP develops annual National Programmes on OSH [5].

By means of the fund Working Conditions MLSP actively aids the activities for ensuring occupational safety and health. The fund provides the means for the training of employers, trade union members, members of committees and groups on working conditions and specialists in occupational safety and health in the respective enterprises. It provides gratuitous financing for projects for the diagnostics of professional diseases and some of the projects aimed at solving specific problems for improving the working conditions. It also finances the preparation, printing and circulation of educational and other information material. With the financial support of the fund Working Conditions they hold national conferences, meetings, seminars and other activities in the sphere of OSH.

The Ministry of Health (MH) directs and coordinates the activity of protecting and improving health at work. Institutions with important functions in OSH activities – Regional Inspectorates for Protection and Control of Public Health (RIPCPh), The National Centre for the Protection of Public Health (NCPPh), The National Centre of Radiobiology and Radiation Protection (NCRRP) work in the system of MH.

Other Ministries also have functions in the area of OSH – The Ministry of Regional Development and Public Works (MRDPW), The Ministry of Economy, Energy and Tourism (MEET), The Ministry of Transport (MT), The Ministry of the Interior (MI), etc.

Specialized bodies and institutions involved in the control and supervision of OSH are: The Government Agency of Metrology and Technical Supervision (GAMTS), The Directorate for National Construction Control, The National Office “Fire Safety and Protection of the Population”, etc.

The entire control over the observance of labour legislation for ensuring occupational safety and health and over the realization of employment relations is carried out by the Implementing Agency named “Chief Labour Inspection Agency” (IA “CLIA”) with the MLSP. It performs the monitoring of working conditions in this country through the mechanisms of control in the realization of employment relations and in the provision of occupational safety and health. The main indicators, which are monitored by the IA “CLIA” are: total number of enterprises, including small and medium-sized enterprises with ascertained violations concerning safe and healthy working conditions, legal employment; the applied compulsory administrative measures regarding discontinued projects and commissioning in suspended machines, workplaces, etc.; checked execution

of unlawful orders; persons suspended from work; introduction of special regimes of work; closing down of enterprises, etc.; drawn up statements; penal decrees entered into force; authorizations for employing individuals who are under 18 years of age; registered collective labour contracts.

The National Social Security Institute (NSSI) – through its territorial branches – carries out control as regards to the expert examination of the capacity for work, investigates work accidents, maintains an information system of work accidents. The NSSI prepares regular reports on the state of labour traumatism in this country and an Annual Statistical Guidebook on labour accidents. The main indicators, which are observed by the NSSI are: total number of accidents at work; average number of insurers; average number of insured persons; number of lethal accidents at work; coefficients of frequency and weight; indexes of frequency and weight, etc.

In connection with the development and coordination of the state policy in the area of labour inspection and in conformity with The Law on the Inspection of Labour [6] in 2008 there was established a National Council for the Inspection of Labour (NCIL), which is chaired by the minister of labour and social policy and is a standing body for the carrying out of coordination, consultation and cooperation in inspecting labour.

Bulgaria possesses a developed infrastructure of units for providing assistance to employers in the fulfilment of the requirements and duties on ensuring safe and healthy working conditions – offices of occupational medicine, laboratories for the measurement of working conditions, centres for training and consultation in OSH issues.

The activity of ensuring occupational safety and health is formed and carried out on the basis of tripartite cooperation at the national, sectoral and regional level. The standing body for the fulfilment of coordination, consultation and cooperation in the development and pursuance of the policy on the provision of safe and healthy working conditions at the national level is the NCWC. There are functioning sectoral and industry councils on working conditions, which consist of representatives of the national sectoral or industry federations, unions and syndicates of the employed, of the sectoral or industry structures of employers and of an equal number of representatives of the respective ministry or administration.

In all administrative areas of Bulgaria there have been set up regional councils for tripartite cooperation on safe and healthy working conditions. The regional (district and municipal) councils on working conditions consist of representatives of the existing regional unions or organizations of the employed and the employers and an equal number of representatives of the district administration or of the local self-government authorities. There have been established committees on working conditions in the enterprises, through which the dialogue between the employer on the one hand and the workers and administrative personnel, on the other is accomplished.

From what has been stated so far there can be drawn the conclusion that the activity on ensuring OSH in Bulgaria is sufficiently provided for, both in normative and organizational aspect and is aimed at:

- raising the culture of protection of the employed and further development of the system of prevention by means of: refinement of the legislation, training and education, the social dialogue, the common social responsibility, the economic initiatives, the partnership between all participants in the labour process;
- the realization of comprehensive and effective integrated control on the observance of labour legislation;
- the broadening of the infrastructure of offices for consultation and assistance to the employer and raising the quality of that activity;
- the development of social insurance systems and insurance activity and their effective inclusion in the work for the provision and maintenance of safe and healthy working conditions in enterprises.

### **3. The challenges facing OSH in Bulgaria**

The system of OSH in Bulgaria is facing a number of challenges, the most significant among which, according to us, are:

- the ageing of the labour force;
- the increasing percentage of micro- and small enterprises;
- the high relative share of self-employed persons and unpaid family workers;
- the use - still - of obsolete machines and equipment in a number of economic activities;
- the growing number of psychosocial risks;
- the formal compliance with the requirements on OSH on the part of the management of the enterprises, etc.

In 2009 statistics in Bulgaria reported the lowest level of labour traumatism for the past 10 years, but in 2010 the indicators (Frequency coefficient (Cf) – number of accidents at work per thousand insured persons; weight coefficient (Cw) – lost calendar days due to accidents at work per insured person; frequency index (If) – number of accidents at work per 1 mln worked off man-hours; weight index (Iw) – lost calendar days due to accidents at work per 1 mln worked off man-hours) show an increase, which leads us to the thought that perhaps in the existing organizational and technical conditions there has been reached an optimum of sorts (tab. 1).

**Tab. 1. Overall coefficients and indexes of frequency and weight of work accidents, lost calendar days and lost value added in Bulgaria during the period 2006–2010**

Indicators	Year				
	2006	2007	2008	2009	2010
Cf	2,33	1,98	1,75	1,63	1,67
Cw	0,184	0,157	0,179	0,157	0,163
If	1,30	1,11	0,98	0,96	1,03
Iw	103	88	100	92	100
Lost calendar days (num)	260,180	238,869	298,290	254,964	252,792
Lost GVA on account of work accidents (in thousand levs)	13,808	14,351	19,872	18,097	19,862

Source: NSSI, NSI and author's own calculations.

Relative stability is observed in the number of lost calendar days, but here we must bear in mind also the fact that after 2008 the number of employed people has been decreasing constantly. The economic losses manifested in the lost, unearned gross value added (GVA) on account of labour traumatism during the past three years of the period is approaching 20 mln levs, in 2010 the excess in comparison with 2009 being more than 1,7 mln levs. This is due mainly to the increase in GVA per employed person per day.

In 2010 in Bulgaria there was conducted a national survey entitled “Evaluation of the socio-economic costs caused by accidents at work” [7]. The principal results of the survey show that most accidents at work occur in business activities, which are characterized by low values of the indicators total production per employed person and salary per employed person. The decrease in the number of accidents and in their weight remains the only acceptable solution for reducing losses due to unproduced goods as a result of accidents at work. It is precisely this factor and the careful analysis of accidents by sector that we should rely on in the future, since the effect of intensification will always be in the direction of an increased number of accidents, because of the ambition on the part of employers to achieve an increase in labour productivity. The direct economic benefits of averting work accidents at the enterprise level according to the study are manifested in: raising the productivity of labour; improving the quality of goods and services; raising the innovation capacity of the enterprise, etc. The direct and indirect social benefits at the enterprise level find expression in: raising the health status of the employed persons; the increased fringe benefits of personnel, etc.

The direct and indirect economic benefits for society are manifested in: an increase in the total amount of the added value in the economy; raising the revenues in the state budget and increase in the expenditure on social functions – public health, education, culture, pensions, etc.

The statistics and the data from the research on OSH are stimulating for the unification of efforts and for effective partnership between the institutions in solving the problems in the area of OSH and seeking new forms of motivation towards healthy and safe labour.

According to data provided by Eurostat for 2008 and 2009 [8] in Bulgaria, it has been found that within the age groups of under 18, 18–24 and 55–64 there is a considerably greater number of accidents in comparison with those of 25–34 and 35–44, i.e. the lack of experience and the advancement in years have a negative effect. The labour force in Bulgaria during 2006–2010 is of a markedly stable gender structure and of varying age structure (tab. 2).

**Tab. 2. Structure of the labour force in Bulgaria by sex and age for 2006–2010 (%)**

Gender and age	Year				
	2006	2007	2008	2009	2010
Male	52,97	53,03	53,27	53,34	53,07
Female	47,03	46,97	46,73	46,66	46,93
15–24	8,74	8,43	8,45	8,2	7,94
25–34	23,38	22,42	21,95	21,26	20,58
35–44	28,16	28,81	28,35	29,26	29,96
45–54	26,38	26,35	26,22	26,03	26,57
55–64	12,18	12,7	13,47	13,81	13,65
over 65	1,16	1,29	1,56	1,44	1,30

Source: NSI and author's own calculations.

With men there occur about 2.5 times more accidents with four and more lost working days than with women. The reform in the pension system has had its influence, but there should be noted the decrease in the relative share of the young labour force under 35 years of age and the increase in the remaining age groups.

The structure of enterprises in Bulgaria according to the number of employed persons in them noticeably changes (tab. 3).

**Tab. 3. Structure of enterprises in Bulgaria for the period 2008–2010 according to the number of employed persons, average number of employed persons in a group of enterprises**

Indicators	Year		
	2008	2009	2010
1. Structure of enterprises according to the number of employed persons – total (%)	100,00	100,00	100,00
0–9 (%)	89,78	91,23	91,9
10–49 (%)	8,28	7,19	6,63
50–249 (%)	1,68	1,38	1,27
250+ (%)	0,6	0,20	0,20
2. Average number of employed people in a group of enterprises	6,87	5,96	5,67
0–9 (num)	2,01	1,96	1,91
10–49 (num)	20,07	19,87	19,74
50–249 (num)	98,23	96,59	95,95
250+ (num)	680,14	677,89	677,05

Source: author's own calculations based on NSI data.

The percentage of microenterprises in a period of only two years grows by more than two percent at the expense of small, medium-sized and large enterprises. In addition to that, under the influence of

the economic crisis there is observed a decrease in the average number of employed persons in each of the groups of enterprises. In the strategy for safety and health for the period 2008–2012, the development team points out – and the practice confirms it – that in the small and medium-sized enterprises the knowledge in OSH is usually insufficient or is often lacking and the risks are not equally manifested in the large and small enterprises.

In the economy of Bulgaria the self-employed persons and the unpaid family workers account for about 9% of all employed persons (tab. 4).

**Tab. 4. Employed persons by status of employment in Bulgaria for the period 2008–2011 and their structure**

Indicators	Year		
	2008	2009	2010
1. Employed persons total – (in thousands), inclusive of:	3360,7	3253,6	3052,8
Employers	122,9	113,4	115,1
Self-employed persons	259,9	259,4	242,7
Employed persons	2943,8	2847,6	2662,8
Unpaid family workers	34,0	33,3	32,2
2. Structure of the employed persons – (%), inclusive of:	100,00	100,00	100,00
Employers	3,67	3,49	3,77
Self-employed persons	7,73	7,97	7,95
Employed persons	87,59	87,52	87,23
Unpaid family workers	1,01	1,02	1,05

Source: NSI and author's own calculations.

Despite the duties ensuing from the law, with these forms of employment the application of any OSH standards cannot be expected, and even if this was done, the respective persons could hardly be competent enough with regard to ensuring OSH.

According to data provided by the NSSI [9] the biggest percentage of accidents, particularly those resulting in disability and death is generated by traditional industrial activities such as the extractive and processing industry, the production and distribution of electrical and thermal energy and gaseous fuels, water supply, sewerage services, construction, transport, etc. The obsolete machinery and equipment not only lack competitive productivity, but also create harmfulness and hazards for the employed. Conclusions in that respect can also be made from the nature of labour accidents by type of harm and by affected parts of the body [8]. In 2009 41% of those were fractures, 31% – injuries and flesh wounds, 12% were dislocations and sprains, 6% – concussions and internal traumas, 5% – burns, scalding and frostbite, etc. The greatest numbers were contusions of the upper limbs – 41%, the lower limbs – 32%, the head – 16%, the torso – 7%.

Psychosocial risks at the workplace are identified as some of the major present-day challenges to safety and health. They are associated with problems at work such as stress, violence, anxiety and harassment. Psychosocial threats can be defined as: those aspects of the planning, organization and management of the work and the respective social and environmental context, which may possibly cause mental, social or physical damage [10]. As a result of stress psychosocial hazards may affect directly or indirectly one's mental and physical health. Stress at work is often pointed out as the main issue for employers, who work in the sphere of public health and social services.

The highest levels of anxiety are observed in the work with problematic customers, patients, students, etc., which is most typical of public health services and social activities, the hotel industry, the catering industry and education. Among 79% of the individuals holding managerial positions in Europe there is observed anxiety, connected with stress at the workplace, which shows that in enterprises stress is a factor of the same gravity as work accidents. Anxiety, irritability and stress affect the professional life of the employed in the different sectors of the economy in various

degrees. The sectors of public health, social activities, transport and services are most problematic. Eurostat data [8] shows that stress, depression and anxiety are common causes of absenteeism for more than 14 days in sectors such as public health and social activities. In those sectors mental problems are almost as frequent a cause for absence from work, as are musculo-skeletal injuries.

Certain occupations are particularly risky for various forms of violence – education and public health, transport and communications, the hotel and restaurant industry, the service industry, retail trade, etc. Actual physical violence (from people outside the company) is experienced by employees in education and public health, the hotel and restaurant industry, transport and communications, retail trade, etc. Harassment at the workplace is reported in sectors such as the hotel and restaurant industry, education and public health, transport and communications. Unwanted sexual attention is observed most often in the hotel and restaurant industry, education and public health, transport and communications.

The formal fulfilment of the requirements on OSH on the part of the management of the enterprise is also among the contemporary issues in this area. The cited study [10] points out that in the EU the issues connected with OSH are raised regularly at top level meetings only in 40% of the enterprises under study, the percentage rising proportionately to the size of the enterprise. Exactly the same is the percentage of Bulgarian enterprises as well, i.e. Bulgaria is at the average European level. Even more disturbing is the fact that in 15% of the enterprises the issues connected with OSH are practically never raised at top-level management meetings.

The outlined problems facing OSH activities, which are typical of the present day, require the finding of approaches for their solution. Part of those ensue from objective demographic and economic processes. To give universal directions for coping with them is extremely difficult. Still, there can be formulated some priority guidelines.

In order to minimize the risks at work and the pursuance of effective policy in the area of OSH, first and foremost it is necessary to develop an information system that is functioning well enough, which would provide adequate and reliable information to the enterprises, accounting for the nature of their activities, the professional hazards, the level and dynamics of traumatism, etc. Bulgaria possesses a well-developed and functional system for the administration and reporting of the risk “accident at work”, but that for the risk of “occupational disease” is still in the process of providing information services.

Second, employers must be held responsible upon finding a formal approach on their part to the activity in OSH in enterprises. The involvement of key personnel is a major factor for success in the management of OSH activities. In addition to the observance of formal duties dictated by the law, particular attention should be paid to the control over the work with risky age groups. The policy on OSH should become a principal element of company culture.

Third, there must be strengthened the controlling and explanatory activity of the responsible institutions (IA “CLIA”, the offices on occupational medicine, the centres for training and consultation in issues of OSH) in the micro- and small enterprises, as well as among the self-employed persons and the unpaid family workers.

Fourth, at the national level and in the enterprises there should be raised the quality of preventive and restrictive measures with regard to psychosocial risks. On the basis of estimates and risk assessment it is possible to identify the hazards that are most significant. Some risks can be avoided by taking the appropriate measures on the part of the employer.

Other risks are difficult to avoid, but they can be influenced and there can be affected the extent of the risk and the gravity of the harm caused by it. There can be taken certain preventive measures: clear orders, balanced allocation of working tasks, the degree of freedom of the employed person to affect the entire process, awareness, clear procedures, directions and responsibilities associated with the particular powers, etc.

Fifth, with the help of the fund Working Conditions there should be initiated the gradual removal of obsolete machinery and equipment. There should be provided incentives to employers, who invest funds in the refinement of the equipment and technology that are used.

#### **4. Conclusion**

Working conditions are a characteristic, which directly affects the overall presentation of the enterprise in the real economy. The analysis of the current state and the trends facing OSH provide the possibility to formulate the main priorities, which, in our view, will determine the development of this activity in the near future:

1. Control over the practical compliance with legislation in this country.
2. Completion of the information system on OSH.
3. Strengthening of prevention in respect of psychosocial risks.

The issues discussed here are complicated from both theoretical and practical viewpoint, they are not subject to straightforward assessment and decisions. In the practice of production it is impossible to completely eliminate work accidents, occupational diseases and psychosocial risks, but the effort made on the part of the institutions concerned and the social partners in Republic of Bulgaria is a guarantee that the activity on OSH will keep on being perfected.

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#### **Summary**

In the article there are discussed the organization of OSH activities in Republic of Bulgaria and the main issues it is facing. There are outlined the most significant contemporary challenges that lie ahead of the OSH system in Bulgaria: the ageing of the labour force, the increasing relative share of micro- and small enterprises, the high percentage of self-employed people and unpaid family workers, the use of obsolete machinery and equipment, the growing number of psychosocial hazards. Possible approaches to their solution are put forward.

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