Defining Policy for Management of Occupational Health, Safety at Work and Environmental Protection in order to Manage the Crisis in a Business Organization

Darko Palačić[1] and Matija Mudri[2]

[1] College of Applied Sciences in Safety, Zagreb, Croatia
[2] Ministry of the Interior of the Republic of Croatia, Zagreb, Croatia

A B S T R A C T

A precondition for effective crisis management in the field of health, safety and environmental protection (OHS&E) that can arise in a business organization is a properly defined policy of business organization. Management policies in health protection, safety at work and environmental protection is a framework for action and setting general and specific objectives of the protection of health, safety at work and environmental protection. It is a set of rules, guidelines, and procedures that define how to make the business system safe and to protect its human, technical, technological and other values. Policy management system must include goals related to the constant improvement of health, safety and environmental protection, depending on the identified hazards and risks. In defining OHS&E policy it must be taken in account the fact that it is appropriate for the nature and scale of risks, which involve potential crises.

Key words: *Crisis, environmental protection, politics, safety at work*

Introduction

Occupational health and safety management

Every employers goal is Occupational health and Safety at work Management. Such approach to all business processes brings security, easier market placement and accordingly higher business profit, while workers have assured more qualitative and safer execution of work assignments. To manage health protection and safety at work in a business organization is not enough to use only safety equipment as a means to protect workers. Most of employers still thinks in that manner, but some view health protection and safety at work as a system, a part of entire business system that brings higher results. Defining such system and the way of management as well as advantages it brings along, this system, in 1990s, first were recognized by standardative institutions in Great Britain. This institutions have defined health protection and safety at work policies with guidelines BS 8800 and Management regulations. In late 90s, first standard has been published that comprised a number of guidelines that were implemented in occupational health and safety at work. First standard for defining such policies, standard OHSAS 18001 was published in 1999 in Great Britain. It was made with consultations with world's biggest certification houses and standardative bodies that accepted standard as leading standard in occupational health and safety management. In year 2007, a new and enhanced standard was published, which is still used today as OHSAS 18001:2007.

Occupational health and safety management system is a part of overall system that makes health risks management inherent to business activities of an organization possible. System accepts organizational structure, planning, responsibility, practice, actions, processes, resources for development, implementation, achievement, examination and maintenance of health protection and security policy of an organization.

Standard OHSAS 18001 implemented onto this day for occupational health and safety management is comprised of four main chapters: Scope, Reference publications, Terms and definitions and OH&S management system requirements.

Above stated standard, among other, determines requirements for crisis management in business organization. Operational control gives assignments to organization for identification of those processes, actions, and activities that are connected with risks requiring implemented measures of management and controlling. Such approach and identification of possible risks enables preventive actions on all possible consequences that could to organization and/or a worker bring harm or endanger health, as well as deviation form safety standards. Organizations main task is planning all mentioned activities including maintenance to assure implementation according specified conditions. Preventive actions minimize risks to a lowest level, and possibility of accruing unpredicted situations, which is one of the objectives of implementing standard requirements. Emergency preparedness and response sets requirements for organization to establish and maintain plans and actions for determining possibilities and response in case of emergency and extraordinary situations. Such approach clearly defines actions in extraordinary situations which might as a result have an injury or death of a worker, business process dismissal and loss for the organization. Constant examination of such processes implemented in organization enhances readiness on all possible unwanted events, and approach to such crisis situations. By complete removal or minimization of risk level, unwanted events are eliminated to the lowest level, as well as actions in crisis situations during unwanted events. Acting conscientiously and with preventive work, the limit of safety is elevated to a higher level, and business organization is closer to a basic objective – effective occupational health and safety management. Defined occupational health and safety management policy according to standard OHSAS 18001 gives to business organization a direction to avoid accurence of crisis situations, and in case if such event occurs it directs actions in crisis situations. Current practice shows a conclusion that for efficient crisis management in field of health protection and safety at work is nececary to define health protection and safety at work, regardless of kind and size of business organization. Implementing such policy, business organization to its employees and surroundings demonstrates responsibility and readiness in preventive action in health protection, but as well in response to unwanted events caused by crisis situations.

Environment protection management

If we wish to effectively manage environment protection, it is necessary to first define environment. According to definition, environment is natural surroundings of organisms and their community including humans, that enables their existence and further development. Defining environment protection policies and processes ma-

nagement that conducts environment protection are requirements of standard ISO 14001. By implementing requirements of standard ISO 14001, business organization confirms that it systematically manages environment, in other words, it is assured that all impacts on environment in organization are identified, monitored, and coherent with law regulations. Acting according requirements of this standard organization minimizes negative impacts on environment, and risk of ecological incidents. Implementing standard ISO 14001 in business organization sets requirements about planning, establishment, implementation and monitoring that needs to be fulfilled to conduct environment according to standard requirements. Basic requirements of this standard are defining policy and goals of environmental impact, recognizing aspects and influences on environment, recognizing legal and other demands in environment protection regarding organization. Defining obligations and responsibilities of the business organization for top management and its employees is very important in entire process. Ensuring resuorces and material assets that are secluded for implementing measures for decrease and/or elimination of negative impacts on environment greatly helps in achieving desired results. Working for continuous system improvement prevents occurrence of new events in an organization that do not have current solutions for its elimination an for additional environment pollution and additional financial assets for covering expenses. The aim of each organization is decrease of environment pollution and avoiding crisis situation regarding environment that can bring damage to the organization and other interested parties. Coherent to basic principles in environment protection (principle – polluter pays) from Environmental protection law (N.N.br., 110/07.) business organization that pollutes environment pays the expenses incurred by environmental pollution. Those expenses include damage estimates costs, as well as estimates for necessary measures and damage eliminations to the environment. In that sense every business organization has the interest for environmental management and avoidance of crisis situation that endanger environment. Expenses alone are the least that can happened. Polluting environment and surroundings in which humans abide and work has hazardous impact on human/workers health. Standard ISO 14001 is structured in four basic chapters: Scope, Standardative references, Terms and definitions and Environmental management system requirements.

Defining the environmental protection policies and implementing environmental protection processes as stated in the standard it is necessary to define all aspects that exists in business organization. Aspects determination defines the impact on environment.

Generally speaking, overall objective of the standard is to help in environmental protection and pollution prevention as well as help business organization to harmonize in that field with socio-economic needs.

For accomplishing desired results in the field of environment management it is possible to implement a module compliant to requirements of standard ISO 14001.

Such module among other defines establishment of Environmental management polices, that needs to refer to possible crisis situations regarding environmental protection. Such module among other defines determination of environment protection policies that need to refer to possibile crisis in environment protection. After defining approach policies, within management system desired actions are planned. On basis of conducted planning follows the phase implementing and striving in the goal of environment protection, controlling and fixing actions that can additionally enhance results. On basis of all conducted actions top management evaluates environmental management system efficiency, and after follows enhancements. Implementing environmental protection policies prevents immediate impact on environment, and by planning future actions organization clearly develops action plan in crisis situation that can have impact on environment. Such planning and acting in crisis and preventive actions clearly defines processes in organization as well as response to the same. Consistent requirements implementation of standard ISO 14001 will enable business organization to act efficiently in case of crisis events.

Material and Methods

The purpose and objective of the research

Occupational health, safety and environment protection policies (OHS&E) represent a frame for actions and setting single objectives in managing health protection, safety at work and environmental protection. It is a group of regulations, guidelines and actions that define a way to make business system secure and the way to protect its human, technical, technological and other values. In defining OHS&E policy it is necessary to make it appropriate to nature and risk scope, and possible crisis situation. Following, the purpose of research is to determine the manner in which the defined policy of occupational health and environment protection can be in function in managing crisis situations in business organization.

The objective is to determine the measure scope of OHS&E policy in function of managing crisis situations in business organization.

Hypotheses

Research comprises comparison of results according to 3 proposed hypotheses:

– Hypothesis H1: Occupational health and safety at work policy requirements according to standard OHSAS 18001 oblige business organizations occupational health and safety at work policy to contain requirements for managing crisis situation.
– Hypothesis H2: Requirements of environmental protection system according to standard ISO 14001 oblige business organizations environment protection policy to contain requirements for managing crisis situation.
– Hypothesis H3: OHS&E Management policy must be in function of managing crisis situation in business situation.

Tasks and research methods

According to set objective, the tasks of this research are following:

– to analyze and show basic theory postulates in field of Occupational health and environment protection policy
– to analyze and show theory postulates in field of managing crisis situations
– to analyze requirements of standard OHSAS 18001 i ISO 14001
– to determine requirements of standards OHSAS 18001 i ISO 14001 that oblige business organization to make the OHS&E policy in function in managing crisis.

On the grounds of determined problem, set objective and task of scientific research, appropriate scientific methods are chosen for methodology of work. Research methods represent purposeful problem solving. Methods of documentation and content study analyze theory basics in occupational health and environment protection policy and standards OHSAS 18001 i ISO 14001 that refer to the field of defining OHS&E policy in function of crisis management. By method of analyzing content theory is postulated and standard requirements are parched. By description method theory postulates and standard requirements are described. After conducted analysis and comparison, essential features are synthesized and conclusions are drawn.

Results

Business organizations daily face inner and outer elements and conditions that impact on occurrence of crisis in the field of OHS&E. Implementing OHS&E is in function of creating conditions for stable and secure business and achieving business objectives. Therefore in the process of risk assessment in the field of OHS&E beside the risks that occur in regular work it is necessary to view all other risks of the occurrence of crisis[1]. Risk assessment is consistent part in crisis situations risk management. It conducts structural identification process to define the risk impact on set objectives, it analyzes risk in the sense of consequences it can cause, appearances probability, before it is decided if it is necessary to further treat crisis situations risk[2].

Each business organization safety must be adjusted and coordinated with risks. Defining necessary safety measures that would be most efficient and financially best (optimal), is a complex process[3]. One of the main tasks of risk assessment and analysis in the field of OHS&E is to determine protection measures and set actions for treatment and crisis management.

Generally speaking, risk management is a process of recognition, assessment, treating and controling possible events that can impact the organization, and is implemented for removal or minimalisation of operational

risk, protecting company reputation as well as protecting all that participate in organizations business activity.

Risk management can be defined as a group of all regulations and measures that refer to recognizing and dealing with risks. Basic task is management and controlling of existing and potential risks and timely preparation for avoiding threat situations and managing it, for safety enhancement[4]. This objective is accomplish by risk analysys, measures for safety enhancement and risk control.

For risk management in the field of OHS&E can efficiently be applied international Standard ISO 31000: 2009 Risk management – Principles and guidelines. Standard ISO 31000 defines generic process for risk management, a process that is totally independent from the implementation field, which means that it can be implemented in OHS&E, as well as risk management in occurrence of crisis situations. Standard does not state methodology of risk assessment realization, because methodology of risk assessment can strongly depend on the implementation field. Depending on practical implementation possibility, quantitative and qualitative methods can be used with number of variations and kinds[5].

Basic structure of risk management in crisis situations in the field of OHS&E contains various steps and cycle that includes identification, quantification, decision making and risk minimalisation, while terminology and stress depend on problematics and specificiallity of implementation field[6].

There are number of approaches to analysis and risk management that are divided by depending methods implemented to quantitaive and qualitative[7].

In accordance with technological advancement in field of OHS&E it is necessary to impelemnt risk management in occurence of crisis situations that needs to have following feautres:

– risk evaluation must be continual process
– everyone participate in risk management, personnel and inefficient business processes and work operations represent prime source of risk
– top management must take responsibility for evaluation and risk management and define the risk management plan
– real risk sources must be continually monitored and evaluated to achieve preventive management effect.

The word »crisis« and »crisis situations« is a term used often in the dictionary and in last couple of years in everyday speech too. The term »crisis« is usually used for all types of unwanted, unpredicted and unexpected events, it is used in almost all fields and areas.

One of the definitions that defines the term crisis from the author White-Mazura in 1996, says: »Crisis situation represents one unusual event or a series of events that adversely effect on integrity of product, reputation or financial stability of an organization, on health or mood of employees, to community or society in general.«

Although it is generally known that absolute safety does not exists and that all processes might have un-

wanted events, safety management implies foreseeing such events in highest possible level and clearly defines response to the same.

Crisis planing is a process of timely preparation for removing crisis hazards, mitigation of consequences that can have hazardous impact on organization, development of means and capacity for acting in crisis situation. Foreseeing such situations greatly enhances acting in it. By right and timely actions, in other words crisis management brings hazardous impact of crisis in a business organization to the minimum. Crisis management is a discipline that deals with risks and avoidance of the same. Speaking of crisis management we speak of continuous process implemented in an organization where every single person participates in order to avoid or mitigate impact of all kinds of crisis. Crisis management is divided into four phases: mitigation, readiness, response and recovery.

Mitigation phase is also called a phase for mitigation of crisis consequences. In an organization mitigation phase has e number of processes and actions for risk identification, hazard assessment and its effect on organization and employees. By qualitative implementation consequences of this phase are greatly minimized and level of safety is elevated. Readiness is planning actions in crisis situation. By planning it is easier to access situations, and effect is much better then in emergency sudden situations.

Response to crisis situations is most important phase in crisis situations. Response is realized in short period which requires skills, knowledge, concentration and very often effort.

Timely response to crisis does not allow its spread on other business fields in an organization. Preventing the spread of crisis is actually prevention of the emergence of new crises.

Recovery phase is conducted only after acting phase is finished. It is comprised of measures and actions that are conducted for dealing with situations in an organization and faster return to prior state. This shortens duration of crisis.

Meeting with crisis situations in business organizations is not new and the management thereof is considered as one of the standardal activities of the organization. Investing in prevention of crisis situations that affect workers or the environment greatly reduces costs incurred for emergency crisis action.

Health protection, safety at work and environmental protection are integral part of working organization and execution of the work process, and are achieved by conducting actions of safety at work and environmental protection, respecting, regulating, contractual and acknowledged safety at work and environmental protection stipulations, and required measures and employer instructions[8].

In order to ensure efficient health protection and safety at work, the employer is required to make a risk assessment, on the basis that applies rules to eliminate

or minimize the dangers and hazards, and for that purpose to provide all the necessary material resources. Hazard assessment is the process of determining what is the level of risk of injury, occupational diseases, work-related disorders and in the work process that could endanger the safety and health of workers.

Environmental protection is based on the observance of generally accepted principles of environmental protection, respect for the principles of international environmental law, and respect for scientific knowledge. For environmental pollution is responsible a legal or natural person that with its unlawful or improper activity pollutes, allow, or permit to pollute the environment. Among others, the main objectives of the organization and implementation of environmental protection measures are to safeguard the life and health, the prevention of major accidents involving dangerous substances, the elimination of the consequences of environmental pollution, to improve the environment and ensure a healthy environment.

All this implies that the process of risk assessment of safety at work and risk assessment of the environment, include consideration of the risk of crisis requiring immediate action to protect the health and lives of employees, as well as to mitigate the adverse impact on the environment.

The requirements of international standards for the management of health, safety at work and environmental protection is increasingly being introduced into the management structure to encourage better management of these areas. At the same time, standards are used as an instrument for achieving competitiveness in the marketing of goods and services of an organization outside the domicil country. The purpose of these standards is to ensure that international organizations have elements of an effective system for OHS&E management, which can be associated with other management needs, to assist organizations in achieving economic goals and objectives of OHS&E management.

Functions of the OHS&E policy is placed in the central position of the system, and around it forms a circle of management and control management.

Specificity of crisis management in the field of OHS&E recognizes it self in the fact that in these crisis situations, health and lives of employees are threatened, as well as the environment. In doing so, particularly are stressed the human and social aspects arising from the need for effective crisis management in this area.

Standard OHSAS 18001 specifies requirements for health protection and safety management system and enables organization to control its own occupational health and safety risks (OH&S) and improve performances of OH&S system. Standard does not determine success criterion of OH&S system nor it gives detail specifications for establishment of management system. All requirements of this Standard OHSAS 18001 are written to be included into any OH&S system, and degree of its application depends on factors as OH&S organizational policy,

nature of its activities, and risks and complexity of its business operations[9].

Under OH&S performances measurable results are included from OH&S risks management in the organization. Measurement of OH&S performance involves measuring the effectiveness of controls implemented by the organization. In the context of OH&S management system, the results of an organization can be measured and compared to the OH&S policy, objectives and other OH&S requirements[10]. In accordance with previously established, below are described requirements of OHSAS 18001, which relate to crisis management and policy of health and safety at work

Top management shall define and authorize the organization's OH&S policy and ensure that within the defined scope of its OH&S management system it:

a) is appropriate to the nature and scale of the organization's OH&S risks

b) includes a commitment to prevention of injury and ill health and continual improvement in OH&S management and OH&S performance[9].

Mentioned requirements of point 4.2 imply that policy refers to crisis management in a way that is based on the determined nature and extent of the risks of crises and it defines policy of OH&S system which expresses readiness to prevent injury and illness, and continuously improve the OH&S management system and system performance. Based on the above it can be concluded that the crisis management is a part of OH&S policy of any organization.

The organization shall establish, implement and maintain a procedure(s) for the ongoing hazard identification, risk assessment, and determination of necessary controls[9].

According to the shown, procedures for hazard identification, risk assessment and determining controls must contain requirements to ongoing hazard and risk identification and to determine necessary controls regarding crisis management in the area of OH&S.

For change management, organization must identify the hazards and risks associated with changes in the organization, protection management system, or activities – before introducing any of these changes. When identifying hazards and risks associated with the changes, the organization must provide to implement the necessary measures in crisis management of OH&S.

The organization shall establish, implement and maintain a procedure(s) for identifying and accessing the legal and other OH&S requirements that are applicable to it[9].

The organization must ensure that these applicable legal requirements and other requirements that apply to it, are taken into account in establishing, implementing and maintaining its own OH&S management system.

The field of Occupational Health and Safety is regulated by a number of regulations that, among other set requirements relating to the crisis management in the

field of occupational safety and fire protection, as well as an Evacuation plan and Fire Protection Plan.

The organization shall establish, implement and maintain documented OH&S objectives, at relevant functions and levels within the organization.

The objectives shall be measurable, where practicable, and consistent with the OH&S policy, including the commitments to the prevention of injury and ill health[9].

Objectives OH&S system must comply with the requirements of the regulations and must also refer to crisis management in the field of OH&S. To achieve the objectives, programs must be developed to include the allocation of responsibility and authority in the event of emergencies.

Top management shall take ultimate responsibility for OH&S and the OH&S management system.

Top management shall demonstrate its commitment by:

a) ensuring the availability of resources essential to establish, implement, maintain and improve the OH&S management system

b) defining roles, allocating responsibilities and accountabilities, and delegating authorities, to facilitate effective OH&S management; roles, responsibilities, accountabilities, and authorities shall be documented and communicated.

Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources. The organization shall appoint a member(s) of top management with specific responsibility for OH&S. All those with management responsibility shall demonstrate their commitment to the continual improvement of OH&S performance. The organization shall ensure that persons in the workplace take responsibility for aspects of OH&S over which they have control, including adherence to the organization's applicable OH&S requirements[9].

From the above it is clear that organizations must have the resources (staff and specialized skills, organizational infrastructure, technology and finances) required to deal with crisis situations in the field of OH&S, and designated member of the top management must have specific responsibilities for managing crisis.

The organization shall identify training needs associated with its OH&S risks and its OH&S management system. It shall provide training or take other action to meet these needs, evaluate the effectiveness of the training or action taken, and retain associated records.

The organization shall establish, implement and maintain a procedure(s) to make persons working under its control aware of:

b) their roles and responsibilities and importance in achieving conformity to the OH&S policy and procedures and to the requirements of the OH&S management system, including emergency preparedness and response requirements[9].

Standard requirements emphasize the need of employee awareness about the importance of their roles, responsibilities and achieving objectives related to treatment in crisis situations, in accordance with the OH&S policy.

With regard to its OH&S hazards and OH&S management system, the organization shall establish, implement and maintain a procedure(s) for:

a) internal communication among the various levels and functions of the organization

c) receiving, documenting and responding to relevant communications from external interested parties[9].

In accordance with the standard requirements, organization shall establish, implement and maintain procedures that govern the manners of internal and external communication in case of crisis.

The organization shall establish, implement and maintain a procedure(s) for:

a) the participation of workers by their:

– appropriate involvement in hazard identification, risk assessments and determination of controls

– involvement in the development and review of OH&S policies and objectives[9].

According to the above, the organization must include employees in hazard identification, risk assessment and determination of controls in crisis management, and include them in the development and review of the OH&S policy and objectives in part related to the crisis.

The OH&S management system documentation shall include:

a) the OH&S policy and objectives

e) documents, including records, determined by the organization to be necessary to ensure the effective planning, operation and control of processes that relate to the management of its OH&S risks[9].

According to the above, the OH&S policy that applies to dealing with crisis must be documented, and the organization must have documented procedures related to dealing with crisis, which must be proportional to the level of complexity, hazards and risks.

The organization shall determine those operations and activities that are associated with the identified hazard(s) where the implementation of controls is necessary to manage the OH&S risk(s). This shall include the management of change.

For those operations and activities, the organization shall implement and maintain:

e) stipulated operating criteria where their absence could lead to deviations from the OH&S policy and objectives[9].

The standard requirement is that organizations must implement and maintain documented procedures for situations where their absence could lead to deviations from the OH&S policy and objectives related to dealing with crises.

The organization shall establish, implement and maintain a procedure(s):

a) to identify the potential for emergency situations

b) to respond to such emergency situations.

The organization shall respond to actual emergency situations and prevent or mitigate associated adverse OH&S consequences.

In planning its emergency response the organization shall take account of the needs of relevant interested parties, e.g. emergency services and neighbours.

The organization shall also periodically test its procedure(s) to respond to emergency situations, where practicable, involving relevant interested parties as appropriate.

The organization shall periodically review and, where necessary, revise its emergency preparedness and response procedure(s), in particular, after periodical testing and after the occurrence of emergency situations[9].

Requirements of standard by saying define all liability in case of crisis. Obligations of the organization related to the establishment, implementation and maintenance of procedures to identify the potential possibility for crisis and a response to the situation. When planning their own response organization must take into account the requirements of the relevant stakeholders and service for emergency situations (police, fire, ambulance, distributors of electricity, gas, water, etc.). Explicit standard requirement is that the organization must periodically test its own procedure(s) for response to crisis. Also, the organization is required to periodically review and revise its own procedures for preparedness and response to crisis.

The organization shall establish, implement and maintain a procedure(s) to record, investigate and analyse incidents in order to:

a) determine underlying OH&S deficiencies and other factors that might be causing or contributing to the occurrence of incidents

b) identify the need for corrective action

c) identify opportunities for preventive action

d) identify opportunities for continual improvement

e) communicate the results of such investigations.

The investigations shall be performed in a timely manner[9].

These standard requirements bind organization to urgently undertake post-crisis research and analysis process of the crisis in order to determine possible defects due to the implementation of corrective actions to prevent future occurrence of such crises.

Top management shall review the organization's OH&S management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities for improvement and the need for changes to the OH&S management system, including the OH&S policy and OH&S objectives.

Input to management reviews shall include:

a) results of internal audits and evaluations of compliance with applicable legal requirements and with other requirements to which the organization subscribes

d) the OH&S performance of the organization

f) status of incident investigations, corrective actions and preventive actions

i) recommendations for improvement.

The outputs from management reviews shall be consistent with the organization's commitment to continual improvement and shall include any decisions and actions related to possible changes to:

b) OH&S policy and objectives[9].

According to standard requirements, the Management review of OH&S must examine all the possibilities that could result in the improvement and the need for changes to OH&S management system of the organization, including the OH&S policy. In this sense, it is also necessary to analyze all the inputs that are associated with the crisis management in order to provide recommendations as necessary to improve the policies and objectives of the OH&S as well as the implementation of security measures.

ISO 14001 specifies requirements for an environmental management system that enables organizations to the development and implementation of policies and objectives which take into account legal requirements and other requirements to which the organization is committed, as well as information about significant environmental aspects. It applies to those environmental aspects that the organization can control and those which it can have impact on. In the standard itself criteria is not specified for the results of environmental management. All requirements in this standard are intended to be incorporated into any environmental management system. The scope of application depends on the circumstances, such as environment management policy of the organization, the nature of its activities, products and services, as well as the location and the conditions in which it works[11].

In accordance with previously established below are described requirements of Standard ISO 14001, which relate to crisis management and environmental policy.

Top management shall define the organization's environmental policy and ensure that, within the defined scope of its environmental management system, it

a) is appropriate to the nature, scale and environmental impacts of its activities, products and services

b) includes a commitment to continual improvement and prevention of pollution

c) includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relate to its environmental aspects

d) provides the framework for setting and reviewing environmental objectives and targets[11].

Requirements of point 4.2 imply that the policy applies to crisis management within the defined scope of the environmental management system. Based on the above it can be concluded that the crisis management is an integral part of the environmental management policy of an organization.

The organization shall establish, implement and maintain a procedure(s)

a) to identify and have access to the applicable legal requirements and other requirements to which the organization subscribes related to its environmental aspects.

The organization shall ensure that these applicable legal requirements and other requirements to which the organization subscribes are taken into account in establishing, implementing and maintaining its environmental management system[11].

This standard requirement suggests that organization must comply with all requirements of the regulations relating to the treatment in the event of crisis in the field of environmental management and protection.

Management shall ensure the availability of resources essential to establish, implement, maintain and improve the environmental management system. Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources.

Roles, responsibilities and authorities shall be defined, documented and communicated in order to facilitate effective environmental management.

The organization's top management shall appoint a specific management representative(s) who, irrespective of other responsibilities, shall have defined roles, responsibilities and authority for

a) ensuring that an environmental management system is established, implemented and maintained in accordance with the requirements of this International Standard[11].

The standard requires that an organization must ensure availability of all resources related to dealing with crises. Accordingly, personnel who will be involved in handling the crisis must be trained and possess special skills. In addition, top management of the organization must appoint a person responsible and authorised to ensure that the environmental management system in case of crisis reacts according to the requirements.

The organization shall ensure that any person(s) performing tasks for it or on its behalf that have the potential to cause a significant environmental impact(s) identified by the organization is (are) competent on the basis of appropriate education, training or experience, and shall retain associated records.

The organization shall identify training needs associated with its environmental aspects and its environmental management system. It shall provide training or take other action to meet these needs, and shall retain associated records.

The organization shall establish, implement and maintain a procedure(s) to make persons working for it or on its behalf aware of

a) the importance of conformity with the environmental policy and procedures and with the requirements of the environmental management system

b) the significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits of improved personal performance

c) their roles and responsibilities in achieving conformity with the requirements of the environmental management system, and

d) the potential consequences of departure from specified procedures[11].

Requirements of Standard ISO 14001 by command requires that personnel who are in any way involved in the business processes of the organization that may impact the environment, must be competent in education, training or experience. In this way, it reduces the possibility of a crisis situation and in case of their appearance people are trained to act in crisis situations. Accordingly, the organization must determine the need for training for crisis management in the field of environmental management, and unless specified, organization must implement and maintain procedures for raising the awareness of all personnel who in any way participate in the environmental management of the importance of compliance with the environmental policy, significant environment aspects and the possible consequences in the event of deviations from established procedures.

The environmental management system documentation shall include

a) the environmental policy, objectives and targets

b) description of the scope of the environmental management system

c) description of the main elements of the environmental management system and their interaction, and reference to related documents[11].

According to shown, organization must document environmental management policy, the scope of environmental management system and describe essential elements of environmental management system, all that refers to crisis management in this field.

The organization shall establish, implement and maintain a procedure(s) to

a) approve documents for adequacy prior to issue

b) review and update as necessary and re-approve documents

c) ensure that changes and the current revision status of documents are identified

d) ensure that relevant versions of applicable documents are available at points of use

g) prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose[11].

According to the requirements shown in the field of crisis management in environmental management, organization should establish, implement and maintain a process/procedures for the approval of the adequacy of documents, ensuring that changes to documents are clearly visible, ensuring that appropriate versions of the documents are available at points of use, and to prevent inadvertent use of documents that are no longer applicable.

The organization shall establish, implement and maintain a procedure(s) to identify potential emergency situations and potential accidents that can have an impact(s) on the environment and how it will respond to them.

The organization shall respond to actual emergency situations and accidents and prevent or mitigate associated adverse environmental impacts.

The organization shall periodically review and, where necessary, revise its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergency situations.

The organization shall also periodically test such procedures where practicable[11].

In accordance with the standard requirements, the organization must develop a process/procedures for preparedness and response to emergency situations that suit its own needs. In developing this procedure/these procedures, the organization should include all the information about:

- the nature of hazards at the location (eg, flammable liquids, storage tanks and compressed gases as well as the measures to be taken in the event of a spill or accidental release)

- most probable type and size of any emergency or accident

- the most appropriate method or methods to respond to a disaster or crisis situation

- internal and external communication plans

- actions that are needed to reduce environmental damage to a minimum

- actions to be taken to mitigate the consequences of and responses to different types of disasters or emergencies

- the need for a process/evaluation process after an accident in order to establish and apply corrective and preventive actions

- periodic testing procedures for response to emergency situations

- training of staff working in emergency situations

- a list of key people and services (internal and external) for help, including the details of the contact (eg, firefighters, police, emergency service, service for removal due to shedding)

- evacuation routes and assembly points

- the possibility of an emergency or accident on the surrounding sites that are not owned by the organization (adjacent businesses, roads, etc.)

- able to assist the neighboring organizations.

The organization shall establish, implement and maintain a procedure(s) for dealing with actual and potential nonconformity(ies) and for taking corrective action and preventive action. The procedure(s) shall define requirements for

a) identifying and correcting nonconformity(ies) and taking action(s) to mitigate their environmental impacts

b) investigating nonconformity(ies), determining their cause(s) and taking actions in order to avoid their recurrence

c) evaluating the need for action(s) to prevent nonconformity(ies) and implementing appropriate actions designed to avoid their occurrence[11].

According to the presented requirements organization shall establish procedures for dealing with actual and potential non-compliance which may lead to the occurrence of crises in environmental management. It is necessary to define the requirements for identifying and correcting non-compliance, taking actions to mitigate, the study of non-compliance, and assess the need to take action to prevent non-compliance and the implementation of appropriate actions to prevent their reoccurrence.

Top management shall review the organization's environmental management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing opportunities for improvement and the need for changes to the environmental management system, including the environmental policy and environmental objectives and targets.

Input to management reviews shall include

a) results of internal audits and evaluations of compliance with legal requirements and with other requirements to which the organization subscribes

e) status of corrective and preventive actions

f) follow-up actions from previous management reviews

g) changing circumstances, including developments in legal and other requirements related to its environmental aspects, and

h) recommendations for improvement[11].

According to the standard requirements, the environmental management review conducted by the top management includes all the necessary elements to ensure that the management system is suitable, adequate and effective, including changes in environmental policy. Therefore, an analysis is conducted of all incoming data which include the area of crisis management. The outputs from management reviews shall include any decisions and actions related to possible changes to environmental policy.

Security is one of the conditions of human and social life and existence. In times of crisis and emergency situa-

tions that surrounds us and occur in our environment, objectives are to raise the level of safety and to achieve complete security. According to Javorović security is defined as a state of balance between constructive and destructive forces in which it does not come to degradation of the ecosystem, and civilization achievement of the human community and manžs achievements and values, or they do not exceed the scope of their development[12].

Security as a concept can be observed from different points of view, so there are general and specific, individual and collective, national and international security. The aspiration of every individual for their own safety but also the safety of the community in which it is located, works, lives, is the most important content of the human perception of reality and his physical and mental development.

Speaking of security in the organization we speak about the special (branch) security related to the organization.

Acting by the standard requirements of OHSAS 18001 and ISO 14001 safety for workers and the environment is raised to a very high level. By certificating organization, other entities with which the organization operates or will do business in the future, it will be seen as a responsible institution that meets the criteria of managing health and safety at work including environmental protection.

Security policy can not be called just acting according to standards OHSAS 18001 and ISO 14001, because there are a number of standards that can be applied to the organization depending on the type of business.

In the Republic of Croatia safety policy is defined by the legal documents (Constitution, ratified conventions of the International Labor Organization, Law, legal acts). Establishing, implementing, occasional reviewing, and encouraging organization to the implementation of security policies in organizations in accordance with the Occupational Safety and Health Law, is a task of the Croatian government. Occupational health and safety is carried out through the body in system for Occupational health and safety (National Council for Occupational health and safety, the State Inspectorate, Department of Occupational Health, Department of Health and Safety at Work etc.)

The role of the organization in the implementation of security policies is to cooperate with state authorities that implement a security policy and raise awareness about the importance of health, safety and environmental protection.

Awareness of a business organization that the definition and implementation of security policies is a long-term investment, is seen in the approach to security policy.

According to OHSAS 18001 occupational health and safety management policy is defined as the overall intentions and direction of an organization related to their OH&S performance, which formally brings the top management. Occupational health and safety at work policies

provides a framework for action and sets the OH&S objectives.

According to the ISO 14001 environmental management policy is defined as the overall intent and guidelines of the organization in relation to its own results of environmental management that top management has formally expressed. Environmental management policy is a framework for action and setting the general and specific objectives of environmental management.

Both standards define the requirements for management policy and by integration of these requirements common requirements for policy OHS&E are defined.

Accordingly, the management of business organizations must define and certify the OHS&E policy of an organization and ensure that it is within the defined scope of the OHS&E management system:

– appropriate for the nature and extent of the risks in the organization, the impact of its activities, products or services on the environment
– includes readiness for prevention of disease, injury, pollution prevention and continuous improvement of the OHS&E management system and system performance
– includes a willingness to achieve, equal to or better compliance with the relevant legal and other requirements that the organization has accepted, and they relate to their OHS&E risks and environmental aspects
– provides a framework for setting and reviewing general and individual OHS&E objectives
– documented, implemented and maintained
– published and available to all employees who work under the supervision of the organization in order to make them aware of their personal OHS&E obligations
– available to interested parties and the public
– periodically checked in order to remain relevant and appropriate to organization.

Discussion and Conclusions

OHS&E management policy is initiator of implementation and improvement the OHS&E management system of some business organization in a way that it can maintain and possibly improve its management results in this area. Therefore OHS&E policies needs to maintain management commitment to compliance with applicable legal and other requirements, and to prevent damage to health, the injury, environmental pollution, the occurrence of crisis situations in the OHS&E and continuous improvement.

Based on the OHS&E policy organization sets its general and specific objectives. OHS&E management policy should be clear enough to be understandable to stakeholders inside and outside the business organization, and should be periodically reviewed and revised in order to monitor the changed circumstances and information. Its

implementation scope should be clearly defined and should reflect the unique nature, extent and impact of activities, products and services on all aspects of the organization that creates the conditions for health, safety and the environment within a defined area of the OHS&E management.

About OHS&E management policy all working personnel in the organization or on its behalf must be informed, including producers who work in locations and organizations. Informing subcontractors may be in a form other than the statement of the policy (policies, directives, procedures) and accordingly may include only the necessary parts of the policy. OHS&E management policy, should define top management of an organization, which has to be consistent with the general policy of the business organization as well as its quality policy.

It is evident that in the area of OHS&E crises occurs and are resulting in the damage to health, injuries, deaths, and environmental pollution. Such situations can be predicted and business organizations can act preventive in order to prevent crisis situations to not occur, or prepare in advance effective way to counter the anticipated crisis. In order to create the necessary preconditions for effective crisis management in the field of OHS&E, business organization has all the necessary requirements to include in the OHS&E management policy.

From the above it is evident that the OHS&E management policy must be in the function of crisis management and situations that can occur in the field of health, safety and environmental protection. All provisions of the OHS&E policy related to the field of crisis management.

Based on the results, the research of requirements of OHSAS 18001 and ISO 14001 are compared to the results obtained according to set hypothesis and the hypothesis is accepted or rejected.

The study provides a comparison of the results obtained by three hypotheses:

Hypothesis H1: Requirements of management health and safety at work system according to OHSAS 18001 bind the business organization to undertake policies to protect the health and safety for crisis management.

The hypothesis is accepted. Although the statement does not mention, from the documented standard requirements is evident that standard obliges organization that when defining policies to manage occupational health and safety it must take into account all the existing risks, which implies the risk of crisis situations in the field of occupational health and safety at work, by which defined policy provides a framework for action and sets management objectives in this area.

Hypothesis H2: Requirements of Environmental Management System according to ISO 14001 commits busi-

ness organization to undertake environmental policy which contains requirements for crisis management.

The hypothesis is accepted. Mentioned standard in its requirements does not state obligation that the organization must define an environmental policy in order to manage the crisis. Nevertheless, from the stated standard requirements is evident that standard commits an organization that when defining environmental protection management policy it must take into account all aspects of the existing environment, which includes the risk of crises in certain aspects, by which defined environment management policy provides a framework for action and setting the general and specific objectives of environmental management.

Hypothesis H3: Management Policy OHS&E must be a function of crisis management in a business organization.

The hypothesis is accepted. Based on the analysis of the requirements of OHSAS 18001 and ISO 14001 it is concluded that OHS&E management policies must be in function of crisis management in a business organization. To make occupational health, occupational safety and environmental protection policy management in the business organization in function of crisis management, it is necessary to foresee all crises that in this area may occur, the consequences that may arise, and to predict the probability of these crises. Based on these findings it is possible to define OHS&E management policy of operational crisis management in a business organization.

Following the analysis of the requirements of OHSAS 18001 and ISO 14001 is concluded that both standards contain requirements for defining OHS&E management policies in function of crisis management in a business organization.

It is concluded that the objective of the research was achieved. Based on the understanding of the basic aspects of crisis management in the field of OHS&E and analysis requirements of OHSAS 18001 and ISO 14001 conclusions have been drawn about the function of management policies OHS&E in terms of crisis management. The above standards in their demands point to the need to define such OHS&E policies.

To continue the research, it is proposed a launch of detailed study on the definition of OHS&E management policies in function of OHSAS 18001 and ISO 14001 crisis management in business organization. It is needed to conduct a research in the business organizations that hold a certificate of managing according to the requirements of OHSAS 18001 and ISO 14001. In that way data can be collected and analyzed as well as validation of application requirements related to the definition of OHS&E policies related to crisis management in the area of security.

Established methodology has proved to be suitable for the research conducted towards the set objectives.

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D. Palačić

College of Applied Sciences in Safety, Ul. I. Lučića 5, 10000 Zagreb, Croatia
e-mail: darko.palacic@vss.hr

DEFINIRANJE POLITIKE UPRAVLJANJA ZAŠTITOM ZDRAVLJA, SIGURNOŠĆU NA RADU I ZAŠTITOM OKOLIŠA U FUNKCIJI UPRAVLJANJA KRIZNIM SITUACIJAMA U POSLOVNOJ ORGANIZACIJI

SAŽETAK

Preduvjet za učinkovito upravljanje kriznim situacijama u području zaštite zdravlja, sigurnosti na radu i zaštite okoliša (OHS&E) koje mogu nastati u poslovnoj organizaciji je ispravno definirana politika sigurnosti poslovne organizacije. Politika upravljanja zaštitom zdravlja, sigurnošću na radu i zaštitom okoliša predstavlja okvir za radnje i postavljanje općih i pojedinačnih ciljeva upravljanja zaštitom zdravlja, sigurnošću na radu i zaštitom okoliša. Ona je skup pravila, smjernica i postupaka koji definiraju na koji način poslovni sustav učiniti sigurnim i kako zaštititi njegove ljudske, tehničke, tehnološke i druge vrijednosti. Politika sustava upravljanja mora sadržavati ciljeve koji se odnose na stalna poboljšanja zaštite zdravlja, sigurnosti na radu i zaštite okoliša ovisno o utvrđenim opasnostima i rizicima. U definiranju politike OHS&E potrebno je voditi računa o tome da ona bude primjerena prirodi i rasponu rizika, što podrazumijeva i moguće krizne situacije.