IMPLEMENTATION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

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ABSTRACT:

Enhancing Occupational Health and safety performance continually in any organization is paramount element in any organizations. Bench marking an occupational health and safety management performance, sustaining and continually improving is the major aim or any organization. ISO 45001:2018 & ISO 14001:2015:2018 is applicable to any organization that wishes to establish, implement and maintain an OH&S management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities. The present project was aimed to roll out an Occupational Health and Safety Management system (OHSMS) for further enhancing occupational health and safety performance of the organization. The entire project was aimed to upgrade the existing OHSMS to the newly rolled out Occupational Health and Safety Management as per the requirements of ISO 45001:2018 & ISO 14001:2015:2018, ISO 45001:2018 & ISO 14001:2015:2018 specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance.

Keywords: OH&S, EHS, OHSMS, ISO, ISO 45001:2018 & ISO 14001:2015:2018, ISO 14000:2015

1.INTRODUCTION:

ISO 45001:2018 & ISO 14001:2015:2018 is applicable to any organization regardless of its size, type and activities. It is applicable to the OH&S risks under the organization's control, taking into account factors such as the context in which the organization operates and the needs and expectations of its workers and other interested parties.

ISO 45001:2018 & ISO 14001:2015:2018 helps an organization to achieve the intended outcomes of its OH&S management system. Consistent with the organization's OH&S policy, the intended outcomes of an OH&S management system include:

a) continual improvement of OH&S performance;
b) fulfilment of legal requirements and other requirements;
c) achievement of OH&S objectives.

ISO 45001:2018 & ISO 14001:2015:2018 does not state specific criteria for OH&S performance, nor is it prescriptive about the design of an OH&S management system. ISO 45001:2018 & ISO 14001:2015:2018 enables an organization, through its OH&S

management system, to integrate other aspects of health and safety, such as worker wellness/wellbeing.

ISO 45001:2018 & ISO 14001:2015:2018 does not address issues such as product safety, property damage or environmental impacts, beyond the risks to workers and other relevant interested parties. ISO 45001:2018 & ISO 14001:2015:2018 can be used in whole or in part to systematically improve occupational health and safety management. However, claims of conformity to this document are not acceptable unless all its requirements are incorporated into an organization's OH&S management system and fulfilled without exclusion.

ISO 45001:2018 & ISO 14001:2015:2018 specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance.
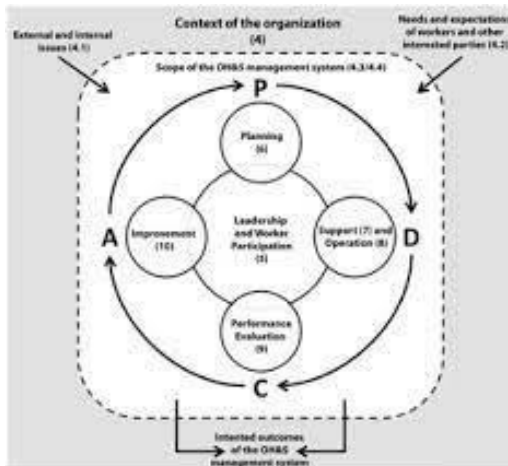
ISO 45001:2018 & ISO 14001:2015:2018 Framework

2. THE ROLE OF ISO 45001:2018 & ISO 14001:2015 IN ORGANIZATION'S MANAGEMENT

According to International Labour Office, every 15 seconds a worker dies from a work- related accident or disease and 153 workers suffer a work-related accident. This statistic stuck out that more than 2.3 million workers die annually due to work-related accidents or occupational diseases. Moreover, in the last years, the perception of risk has been changed substantially as well as the macroeconomic context in which organizations have to perform. The main problems raised by the new and emerging risk are related to psychosocial hazards, introduction of new technologies or globalization or ageing of the population. The population across the EU has been ageing significantly over the last decades and this trend will maintain in the next decades. The EU average age was 33 years in 1960 and is expected to grow to 44 years in 2020 and to 46 in 2060.

The main obligation of the employer is to ensure the safety and health of workers in every aspect related to work. In order to fulfil this obligation, and faced to the changes in micro and macro-economic environment and to the new and emerging risks, the employer needs to adopt a new approach and new instruments to perform an efficient management of occupational health and safety.

In this context, the main role of the ISO 45001:2018 & ISO 14001:2015 standard is to serves as a useful instrument to enable an organization to proactively improve its occupational health and safety performance, regardless the size, type and nature of the organization. But observing the requirements of the standard is not enough. An efficient implementation of the standard requires, in the same time, a very good knowledge and compliance with the legal requirements and other requirements, a complete and up-dated risk assessment and a strong safety culture inside the organization. In implementation of the ISO 45001:2018 & ISO 14001:2015, the organization should not start from zero, but it

should put in value the achievements that it already have.

The structure of the ISO 45001:2018 & ISO 14001:2015 corresponds to ISO Annex SL, guideline for writing standard for management systems. The main advantage of this approach is that all management standards have the same high-level structure, facilitating the implementation of an integrated management system, especially with ISO 9001:2015 and ISO 14001:2015. The structure of the ISO 45001:2018 & ISO 14001:2015 standard is shown in Table 1.

Is expected that an ISO 45001:2018 & ISO 14001:2015 based occupational health and safety management system will enable the organization to improve its performance by:

- Developing and implementing an OHS policy and objectives;
- Establishing systematic processes which consider the organization context, its risk and opportunities and its legal and other requirements;
- Determining the hazards and risks associated with its activities;
- Establishing operational control to manage the OHS risks as well as legal and other requirements;
- Increasing awareness of its OHS risks;
- Evaluating its performance and seeking to improve it;
- Ensuring workers to take an active role in OHS issues.

Chapter no.	Title
1	Scope
2	Normative references
3	Terms and definitions
4	Context of the organization
5	Leadership and worker participation
6	Planning
7	Support
8	Operation
9	Performance evaluation
10	Improvement

3. OHS KEY ELEMENTS RELATED TO ISO 45001:2018 & ISO 14001:2015:2018

3.1 Context of the Organization

In chapter 4, ISO 45001:2018 & ISO 14001:2015 requires the organization to address the following issues:

- Understanding the organization and its context;
- Understanding the needs and expectations of workers and other interested parties;
- Determining the scope of the OHS management system.

To determine and understanding the context of the organization, the ISO 45001:2018 & ISO 14001:2015 standard recommends to address both internal and external context issues, such as: cultural, social, political, legal aspects, introduction of new competitors, contractors, suppliers, partners and providers, new technologies, culture in the organization, form and extent of contractual relationship, working time arrangements etc.

The interested parties, of which expectations should be taken in consideration, include stakeholders, authorities, parent organizations, suppliers, contractors, trade unions and employers' organizations. Before establishing the scope of the OHS management system, a detailed analysis of the organization's context and expectations of workers and other interested parties should be performed. The main instruments that should be used to perform this analysis are:

- Meetings with each interested party in order to document their needs and

expectations;
- Reviews of the legal requirements which are relevant for organization as well as of other requirements, such as contractual clauses or other interested parties requirements;
- Reviewing the good practice examples, in order to adopt the relevant ones;
- Internal audits for evaluation of compliance with legal and other requirements, including the requirements of other interested parties;

Consultations with ohs experts and authorities, i.e., National research and development institute on occupational safety or territorial labour inspectorate.

The results of applying the above-mentioned instruments should be used to define the scope of the OHS management system.

3.2 Leadership and Worker Participation:

Chapter 5, "Leadership and worker participation" address the following issues: leadership and commitment;
- OHS policy;
- organizational roles, responsibilities, accountabilities and authorities;
- participation and consultation.

The main idea that all members of an organization, from top-management to each worker, should understand is that they must have an active role in the OHS management system, and the efforts of all members should be synergic.

At this phase, the following instruments should be used, additionally to the specific requirements of the standard:
- Training courses for all managing levels of the organization, especially for top- management, taking in account that in many situations, top-managers have a poor knowledge of

occupational health and safety principles and legislation;
- Training courses for all workers, in order to make them understand their role as a support for management and to strength the organization safety culture;
- Activating and involving the actors in ohs domain, such as ohs committee, ohs worker's representatives, internal/external preventive and protective service(s), occupational medicine service.

The training courses should be tailored for each level and OHS role in organization and should be oriented on practical issues which are relevant for the focus-group.

3.3 Planning:

Planning the OHS management system is presented in chapter 6 of ISO 45001:2018 & ISO 14001:2015 and refers to the followings:
- Actions to address risks and opportunities, including hazard identification and OHS risks assessment, and determination of applicable legal requirements and other requirements;
- OHS objectives and planning to achieve them.

Hazard identification and OHS risk assessment is one of the most sensitive activities which could decide the success or failure of the OHS management system. The method selected as an instrument for hazard identification and risk assessment should respond to the following main requirements:
- It should enable the identification of hazards and risk assessment for each work system components, respectively, worker, work task, work means/work equipments and work environment for each workplace, as requires the G.D. no.1425/2006

regarding the approval of the Methodological norms for applying the provisions of Law no.319/2006 on occupational health and safety, art.15(1) pt.1

- It should be fitted to the activity type of the organization;
- It should enable to identify and assess all OHS risks related to the organization's activities.

For example, the risk assessment method developed in 1998 by the National Research and Development Institute on Occupational Safety, and widely used by Romanian companies and external preventive and protective services, responds to requirements of art.15(1) pt.1 of G.D. no.1425/2006 and is fitted for industrial activities, but is too detailed for more simple activities such as office activities. It is recommended to review studies which analyse multiples assessment methods and provides clear selection criteria for practical application of most adequate tools.

It is very important that the risk assessment method should enable to identify and assess all OHS risks related to the organization's activities, including new and emerging risks or specific risk. Also, for specific risks, such as fire and/or explosion risks in coal mines, it is more suitable to develop and use additional specialised methods.

3.4 Support:

Chapter 7 of the ISO 45001:2018 & ISO 14001:2015 is related to the following issues:

- Resources;
- Competence;
- Awareness;
- Information and communication;
- Documented information.

In this phase, the main instruments that could be used to fulfil the standard requirements are the following:

- Trainings and courses to maintain qualification or to acquire a new qualification;
- Formal or informal meetings with different interested parties on ohs aspects, as a support for information and communication process;
- Awareness programmes for contractors, temporary workers, visitors etc. In accordance to ohs risks at which they are exposed.

3.5 Operation:

Regarding operation of OHS management system, the following issues should be addressed:

- Operational planning and control;
- Management of change:
- Outsourcing;
- Procurement;
- Contractors;
- Emergency preparedness and response.

The main instruments that could be used in this phase, additionally to the requirements of standard, are the following:

- Trainings for ensuring the competence of workers, to update their competence as a part of management of change or to rise the response capacity of workers in emergency situations:
- Internal audits focused on compliance with preventive regulations and manufacturer's instructions for equipments;
- Internal audits focused on compliance with essential requirements of safety for machinery;
- Checklists and questionnaires on ohs issues for suppliers and contractors.

3.6 Performance Evaluation:

Chapter 9 of the ISO 45001:2018 & ISO 14001:2015 is related to the following clauses:

- Monitoring, measurement, analysis and evaluation, including evaluation of compliance
- With legal requirements and other requirements;
- Internal audit;
- Management review.

Practice shows that, if the internal audit of the OHS management system is performed on a proper basis, the evaluation of compliance with legal and other requirements is made, in most cases, on a superficial manner. Among the main causes of this poor approach, we could mention:

- Lack in identification of legal and other requirements relevant for organization;
- Insufficient information and training of the ohs managers and internal/external auditors regarding this requirement.

A proper approach of the evaluation of compliance with legal requirements and other requirements should start with an exhaustive and updated identification of the requirements which is relevant for the organization, including the organization's internal OHS instructions. An efficient instrument for evaluation of compliance should be structured on checklists and should address each legislation article or requirement that is relevant for the organization. An example of method for evaluation of compliance with legal requirements is presented in and is composed by a set of checklists each related to a specific norm, as follows:

- Checklist A "Employer's obligations" and
- Checklist B "Rights and obligations of workers" – both related to the provisions of Law no.319/2006 and G.D. no.1425/2006 – applicable for

the organization's management;

- Checklists C "Specific requirements", from C.1 to C.23 each related to a specific norm, applicable selectively according to the type of activities performed in organization;
- Checklists D "Internal OHS instructions and other requirements", containing checklists elaborated on the internal OHS instructions of the organizations and other relevant requirements, i.e., contractual OHS requirements.

Each checklist is composed by a number of items linked to specific articles of the related norms, and each item could be evaluated by a score from 0 to 3 points, reflecting the compliance with the requirements.

The method enables to determine two qualitative indicators which define the compliance with legal requirements:

- Compliance level – showing the global level of compliance with requirements;
- Safety level – which considers the potential consequences of the risks related to the referred requirements.

3.6 Improvement

Chapter 10, "Improvement", of the ISO 45001:2018 & ISO 14001:2015 refers to the following issues:

- Incident, nonconformity and corrective action;
- Continual improvement.

Instruments used in this context should be focused on the identification of opportunities, such as:

- New technologies;
- Good practices, both internal and external to the organization;
- Suggestions and recommendations from interested parties;

- New knowledge and understanding of ohs issues which is relevant for the organization;
- New or improved materials;
- Changes in worker capabilities or competence;
- Achieving improved performance with fewer resources.

In each case, attention should be paid to a proper risk assessment prior to implementing the improvement resulting from the above-mentioned opportunities.

4. CONCLUSION

Occupational health and safety management system is one of the main elements of the company's general management system and its implementation should be made by integration with other management systems which are relevant for the organization, such as quality, environment or social responsibility.

Romanian companies gained a valuable experience on implementing this type of management systems, using OHSAS 18001, but the projected release of the ISO 45001:2018 & ISO 14001:2015 (planned for February 2018) represents a new approach which requires the companies to take in consideration new key elements for a successful implementation of the OHS management system.

The presented study was performed on the present draft version of the ISO 45001:2018 & ISO 14001:2015, considering that the final version of the standard could mark some differences, but not essentially for the relevance of the proposed instruments as support in implementing and maintaining an OHS management system.

The study results represent an important work instrument for each company, regardless its size and activity domain, interested to implement or upgrade its OHS management system using ISO 45001:2018 & ISO 14001:2015 standard.

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