

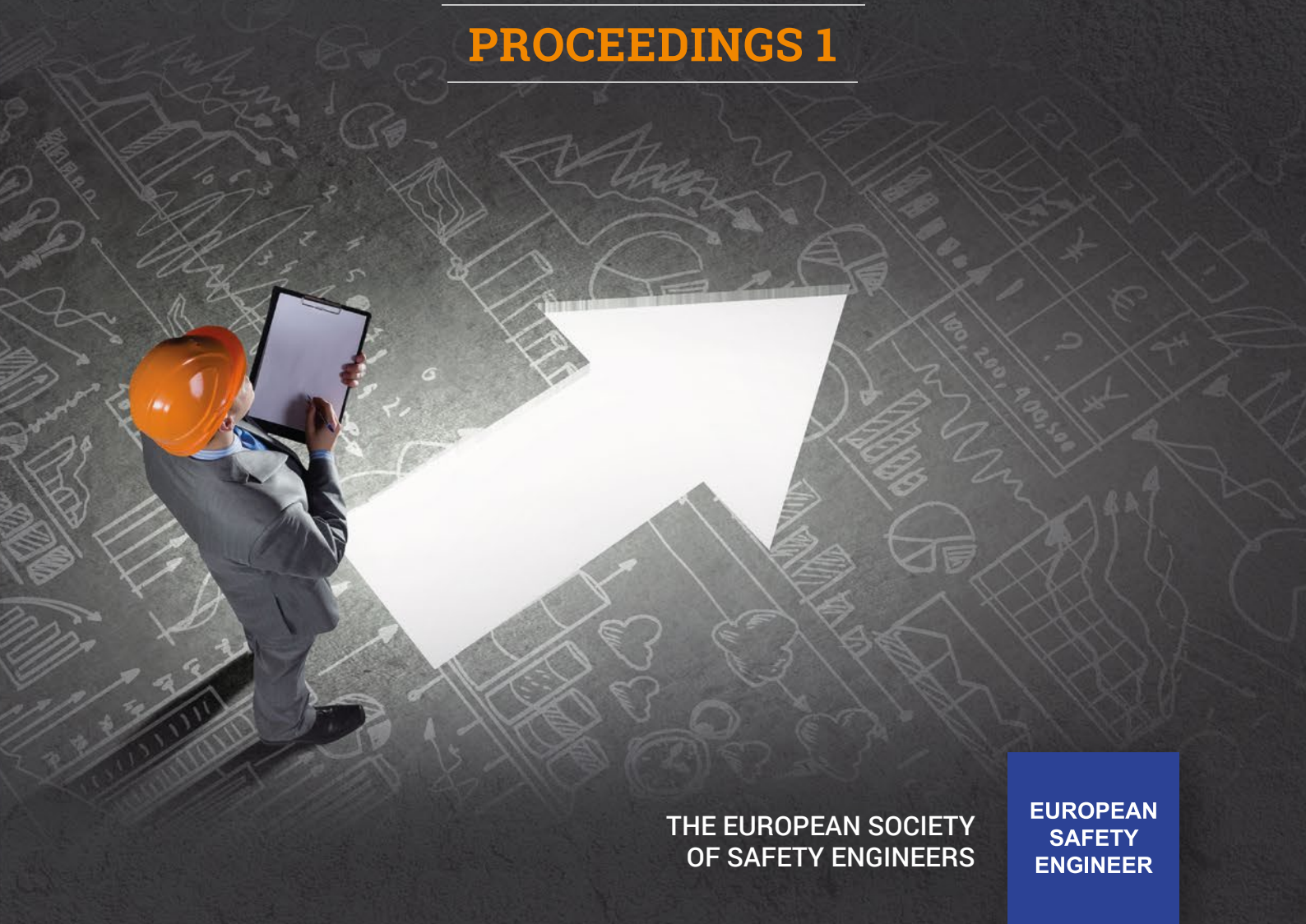
16th INTERNATIONAL CONFERENCE
MANAGEMENT AND SAFETY

M&S 2021

June 18th, 2021 • ONLINE CONFERENCE

RISK AND CRISIS MANAGEMENT

PROCEEDINGS 1



THE EUROPEAN SOCIETY
OF SAFETY ENGINEERS

EUROPEAN
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**16th INTERNATIONAL CONFERENCE
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**PROGRAM CYCLE:
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RISK AND CRISIS MANAGEMENT IN EU EMAS REGULATION

Abstract

The objective of EMAS (Eco-Management and Audit Scheme) regulation of the European Commission is to promote continuous improvements in the environmental performance of implementing organizations by the environmental management system establishment, the evaluation of its performance, the provision of relevant information, involvement of interested parties and the active role of employees. Among other, this regulation defines risk management procedures in order to prevent emergencies that may adversely affect the environment. The regulation stresses the importance of risks assessment of environmental accidents and other emergency situations with a potential adverse environmental impact. Bearing that in mind, the aim of this paperwork is to analyze the specifics of EMAS III regulation, relevant for the risk and crisis management. Analysis of representative examples of the use of EMAS III regulation is also provided. The main findings reflects the importance of organization's ability to enforce environmental and emergency management procedures.

Key words: model, phases, crisis management, EMAS III.

INTRODUCTION

Interest in maintaining and improving the quality of the environment and protecting human health is growing and therefore organizations of all sizes are paying more and more attention to the potential environmental impacts of their activities, products and services. The environmental performance of an organization is becoming increasingly important to internal and external stakeholders. Achieving the right environmental performance requires the organization to accept the obligation to systematically approach the introduction of the environmental management system - EMS (Environmental Management System) and its continuous improvement. Environmental management is the management of the activities of an organization that affect, or may affect, the quality of the environment. Both EMAS and EN ISO 14001 have a common goal, which is to provide quality environmental management, but they still happen to be seen as competitors. The European Commission has recognized that EN ISO 14001 can provide a good precondition for the introduction of EMAS. Adoption of EN ISO 14001 as an element of the management system in EMAS will allow organizations to move from EN ISO 14001 to EMAS without unnecessary repetition and effort. EMAS goes beyond the requirements of EN ISO 14001 on many issues, as it requires an initial review of the state of the environment, the active participation of employees in the implementation of EMAS, and the publication of important information to the public and other stakeholders. The structure of EMS, which is defined by the standard EN ISO 14001 and EMAS Regulation, is part of the overall management of the environmental protection system, which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources [1].

METHODS

For the needs of this paper, a combined desktop and literature research was conducted, where the existing EMAS III connected praxis on national and international scale was analyzed. The synthetic report of identified characteristics are provided within result part of the paperwork.

RESULTS & DISCUSSION

The development of the Eco-Management and Audit Scheme (EMAS) regulation began in April 1995, and its goal is to promote continuous evaluation and improvement of the performance of environmental protection and quality of organizations, which have decided to establish, implement and develop the system. The Eco-Management and Audit Scheme (EMAS) is a management tool by which organizations evaluate, communicate and improve their environmental performance.

The system has been open to businesses since 1995, under Council of Europe (EEC) Regulation 1836/93 of 29 June 1993, giving organizations the opportunity to apply EMAS on a voluntary basis, with participation then limited to organizations operating in the domain of industry. Then introduced EMAS, is known as EMAS I.

One year later, in 1996, EN ISO 14001 was published - an international standard for an environmental management system, which was an additional step towards achieving EMAS. It was also noted then that all sectors have a significant impact on the environment, and that good governance in all sectors will have a positive impact on the environment. Article 14 allows Member States to extend the scheme to other economic sectors, leading to the further development of EMAS, resulting to EMAS II. Several Member States have taken advantage of this opportunity and successfully introduced EMAS in other sectors.

In 2001, a new provision was adopted – EMAS II, allowing the application of EMAS in all economic activities, private and public sector. Its main elements were the extension of the scope of EMAS to all sectors of economic activity including local authorities, and the integration of the international environmental management system standard EN ISO 14001. [2]

In 2009 the EMAS Regulation was revised and modified for the second time. Regulation (EC) No 1221/2009 (“EMAS III”) came into effect on 11 January 2010.

EMAS III includes the following new elements:

- Revised audit cycles to further improve applicability for SMEs (click here for further information)
 - Corporate registrations to ease administrative and financial burdens on organizations with several EMAS registered sites
 - Environmental core indicators to adequately document environmental performance
 - Introduction of EMAS Global to make EMAS accessible to organizations and sites worldwide.
- [3]

Unlike other management system standards, annexes form part of a provision. In other words, annexes are not only informative and the requirements set out in them must be met. Today, participation in the EMAS III system is voluntary and includes public and private sector organizations operating in the European Union or the European Economic Area (Iceland, Liechtenstein and Norway).



-Official statistics of the European EMAS Helpdesk- Organisations and Sites per Country (September 2020)

Country	Organisations	Sites	Country	Organisations	Sites
Austria	262	1245	Ireland	1*	1*
Belgium	65	747	Italy	1010	4933
Bulgaria	14	33	Lithuania	4	6
Croatia	2	3*	Luxembourg	6	9
Cyprus	67	68*	Malta	1	1
Czech Republic	19*	45*	Norway	4	14
Germany	1131	2215	Poland	65	574
Denmark	16*	160*	Portugal	51	86
Estonia	4	30	Romania	8	12
Spain	962	991	Sweden	13	24
Finland	4*	21*	Slovenia	10*	16*
France	30*	41*	Slovakia	20	80
Greece	35	1332	United Kingdom	4	4
Hungary	30*	55*			

Total: 3.838 organisations & 12.751 sites

Source: Official responses from national Competent Bodies
*Numbers from EU EMAS Register

Fig. 1. EMAS III organizations and sites [4]



-Official statistics of the European EMAS Helpdesk- Leading Sectors (September 2020)

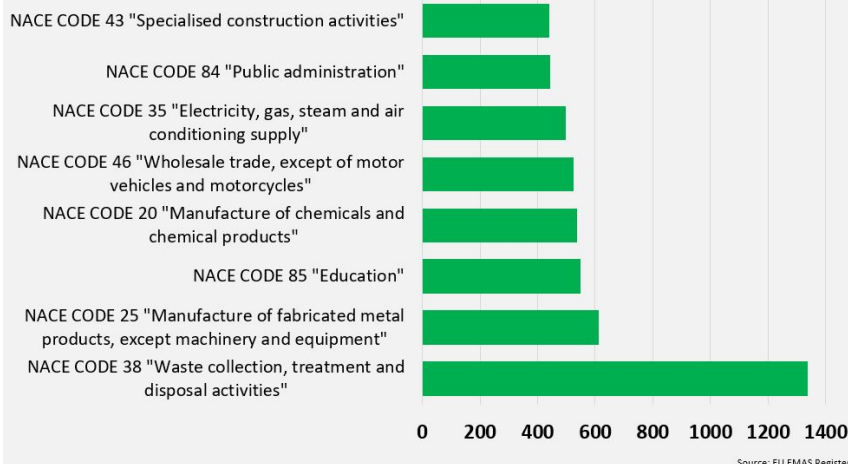


Fig. 2. EMAS III organizations and sites – leading sectors [4]

An increasing number of EU candidate countries are also applying this system in preparation for accession to the European Union. In 2011, the first official EU guidelines were published, which refer to additional clarifications regarding the registration in EMAS of organizations that are not members of the EU - which is of special importance for organizations in the Republic of Serbia.

On the way to EMAS certification, an organization must take four basic steps:

1. To conduct a review of the existing environmental protection system,
2. To establish an effective and efficient environmental quality management system based on the results of the review,
3. Check the environmental management system, and
4. Publish a report on the effectiveness of the environmental managements system.

The EMAS implementation system is organized according to the classic management cycle: Planning - Implementation - Verification - Action (Plan - Do - Check - Act or PDCA cycle) to help organizations develop and implement an environmental management system in accordance with EMAS III, where:

P = planning and organizational structure of EMS

D = implementation of the program

C = control and evaluation of environmental performance

A = action, work on continuous improvement and, equally important, on communication and verification, as shown on Figure 3.

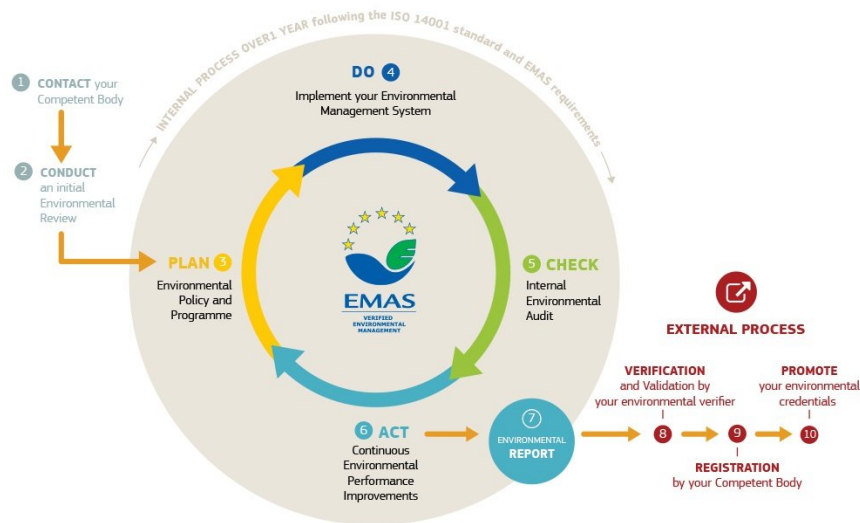


Fig. 3. EMAS III - main implementation steps [5]

One of the steps in the implementation of EMAS III system is to define procedures for managing emergencies and crises. In this sense, according to EMAS III regulation large-scale accidents and incidents can significantly endanger or degrade the environment and the safety and health of employees in the organization and people in the immediate or wider environment of the organization. They can have huge economic consequences for the organization, so the risk of their occurrence and the consequences of adverse events should be reduced. Emergency preparedness and the emergency prevention program are based on learning from previous risky events and accidents and recognizing potential dangers, accidents and emergencies. Environmental hazards are assessed quarterly after each audit through a rapid review form. Accident response exercises should be conducted at a minimum once a year.

Four specific points should be addressed under the Emergency Preparedness and Response section of the EMAS III regulation:

- Identify the possibilities for accidents and emergency situations,
- Prepare emergency response procedures, including preventing and mitigating environmental impacts,
- Periodically test these procedures, and
- Evaluate and revise as appropriate your situations identification and response procedures. [6]

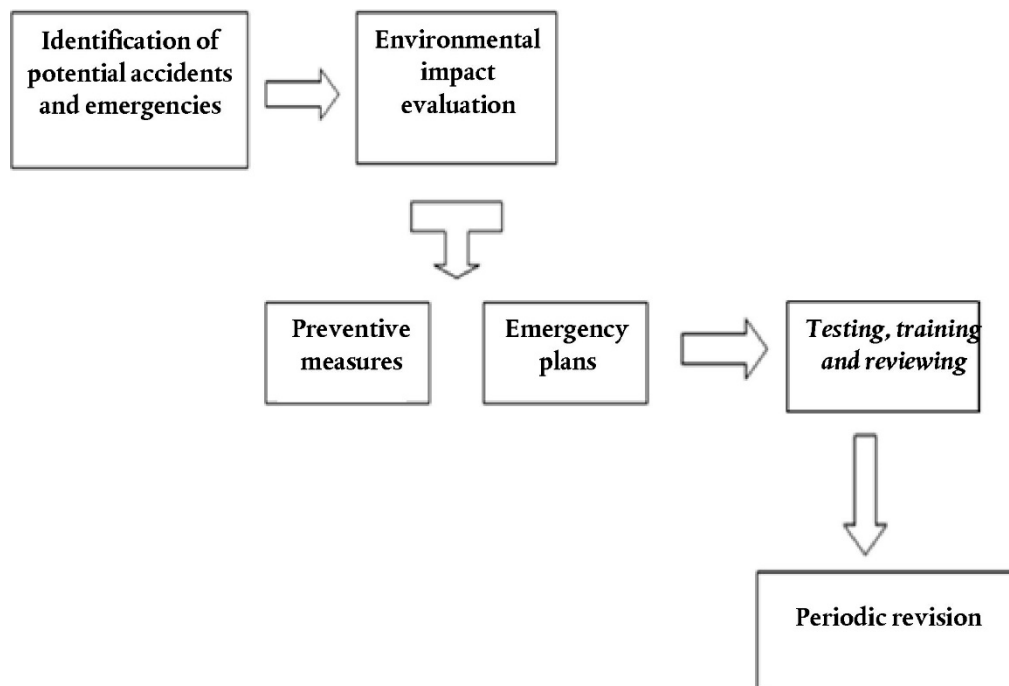


Fig. 4. *EMAS III – steps in emergency management plan development [7]*

Emergency procedures should cover all situations that can be expected in the organization. It is stated that it is necessary to perform a risk assessment in order to determine all potentially dangerous conditions, and adds that the risk assessment for safety and health at work must be re-examined and whether environmental impacts are included in the assessment. The emergency management plan is essential in industry and in organizations involved in potentially risky activities. [8]

RECOMMENDATIONS

Still, there are no significant tax reliefs or reductions of insurance rates, no influence on environmental fees, no priority in obtaining grants and subsidies for the organizations that successfully had implemented EMAS III environmental management system. Some kind of incentive program must be defined at the national level for EMAS-registered organizations. [9]

CONCLUSION

Over the years, it has become clear that responsibility to the community is one of the measures of good management, and caring for the environment is a positive and logical extension of this responsibility. Interest in maintaining and improving the quality of the environment and protecting human health is growing and therefore organizations of all sizes are paying more and more attention to the potential environmental impacts of their activities, products and services. The environmental performance of an organization is becoming increasingly important to internal and external stakeholders.

EMAS is designed to help organizations contribute and provide support from senior environmental management. There is, however, a strong business reason for protecting the environment: wherever they are, waste and pollution are usually symptoms of an inefficient production process. Therefore, they represent an opportunity to improve performance. In this way, participation in EMAS should enable organizations to gain a market advantage through improved stakeholder relations, to feel financial benefits through better control over operations, and to provide assistance in accordance with future and current laws. Today, EMAS III is still of a voluntary nature, but is expected to take on a mandatory character. Modern companies will have to adequately respond to the demands of consumers, who are becoming more aware of the problems of protection and quality of the environment. This can best be achieved by communicating and respecting the defined policy of protection and quality of the environment. As already mentioned, EMAS I was intended only for companies operating in the field of industry. EMAS III later expanded the range, so it can now be used by all organizations that have an impact on the environment. Therefore, the scheme is open to organizations operating in all economic sectors.

The main purpose of establishing EMAS is to ensure the most efficient functioning of economic and other organizations from the point of view of environmental criteria. Another goal is to create conditions for providing relevant information to the public and other stakeholders regarding the state of the environment and the activities of organizations in the field of environment. EMAS contains all the requirements of the ISO 14001 standard, as well as additional requirements.

The current regulations of the Republic of Serbia create the basis for undertaking activities in the field of system construction established by the EMAS regulation. Of great importance are the provisions of the Law on Environmental Protection, the Law on Standardization and the Law on Accreditation, as well as several bylaws. Through EMAS III, which has been applied since January 2010, it has been possible for organizations outside the EU to be included in the official EMAS register. The most significant changes in the legislation related to EMAS have been proposed through amendments to the Law on Environmental Protection. Following the adoption of the amendments to the Law, it is expected that the relevant EMAS Rulebook will be published, which will define in more detail the issuance of a certificate (related to environmental legislation) to interested organizations from Republic of Serbia that apply for EMAS.

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