

## THE ENVIRONMENT MANAGEMENT SYSTEM – MAJOR PREOCCUPATION OF THE FIRMS

**Elena Condrea, Anca Stanciu**

“Ovidius” University, Constanta, Romania, Economic Sciences Faculty, 5, Dumbrava Rosie Str, code 900613, Constanta, email: elenacondrea2003@yahoo.com, castan22us@yahoo.com

### **Abstract:**

*To continue their activity in conformity with the environment law, the economic agents must elaborate a development policy taking in view less polluting working technologies, which will have lower material and energy consumption, to generate less waste, to present minimal ecologic risks.*

*A response to these preoccupations is given by the implementation of the Environment Management System, the elaboration and putting in practice of the correct Environment Policy, in conformity with the current international norms.*

*The result of implementing of the Environment Management System consists in the lowering of the negative effects and the development of the positives effects on the environment.*

**Keywords:** *environment policy, environment management system, environment protection.*

### **Introduction**

We can affirm that, at global level, the last decades are characterized by intense preoccupations regarding the environment's protection, respectively the elaboration of pollution lowering measures, of the environment pollution risk.

More and more organizations, from diverse activity domains, are preoccupied to reach and demonstrate an obvious environment performance, in the objectives and elaborated environment policy, as well as in the monitoring of the impact of their own activities, respectively of the fabricated products and/or of commercialized ones and/or services on the environment.

As result of the intense preoccupations in what concerns the environment's protection, the 207 Technical Committee in the ISO frame has developed the standards' series ISO 14000, which has as main objective supplying the ones which are interested in a common approach frame of the

environment management. The main work directions of the TC 207 specialists (Rojanschi 2004) are:

- Environmental Management System – EMS: ISO 14001, ISO 14004;
- Environmental Audit – EA: ISO 14010, ISO 14011, ISO 14012, ISO 14015 (from 2003, ISO 14011, ISO 14014 and ISO 14012 have been replaced with EN ISO 19011);
- Environmental Performance Estimate- EPE: ISO 14031;
- Eco-marking: ISO 14020, ISO 14021, ISO 14022, ISO 14023, ISO 14024, ISO 14025;
- Life Cycle Analysis- LCA: ISO 14040, ISO 14041, ISO 14042, ISO 14043, ISO 14047;
- Terms and definitions: ISO 14050;
- Environment aspects in product standards: ISO 14060.

To align to the international environmental standards, in 1994, the Romanian Standardization Institute (currently Romanian Standardization Association – ASRO) has constituted the Technical Committee 323 – Environmental Management, which has taken over the adaptation activity of the standards from the ISO 14000 series in Romanian standards SR ISO 14000.

### **Environmental Management System**

In conformity with SR ISO 14050:1999 *The Environmental Management Vocabulary*, **Environmental Management System (SMM)** is considered as being “*a component of the general management system, which includes the organizing structure, planning activities, responsibilities, practices, procedures, processes and resources for elaborating, implementing, realization, revising and maintaining the environmental policy*”.

Currently, at global level has appeared an increase of preoccupations regarding the implementing of the environmental management system at the level of the organizations from all the activity sectors, as an integrated part of their general management. From the objectives sought through the SMM we mention:

- The identification of the environmental aspects, of the impact which the company’s activity has on the environment, of the potential environment risks; the identifying of their control actions;
- The respecting of the environment law by the company, the satisfying of the environment policy;

- The defining of the principal which will be the base of the company's whole activity regarding the environment's protection;
- The establishment of the resources needed to reaching the objectives fixed by SMM;
- Making the cost-benefit ratio generated by the implementation of the SMM and the establishment of increases in environment performance of the company on its base;
- The realization of an efficient communication system in the company and the training of the personnel on the environment problems;
- The defining of the responsibilities, authorities and procedures which will ensure the implication of each employee of the company in the minimizing of the negative effects on the environment.

SMM differs from an organization to another, depending on the type, nature, size, complexity of their activity. Although, there are some base elements which are found in every SMM implemented in an organization, elements like (Rojanschi 2004):

- the obtaining of the arrangement from the general management of the company regarding the desire and support in the implementing of the SMM;
- the initial analysis of the organization; the exact establishment of its position in relation with the environment;
- environmental policy (usually, it is also published as *Environmental Policy Declaration*), which shows the arrangement of the general manager to conform to the environmental law and to follow the continuous improvement of the environmental performance. Thus, there are assured the responsibility of implementing the environmental policy, as well as its necessary support.
- The environmental program/action plan – translates the environmental policy of the organization in objectives and targets and identifies the activities necessary to reach them; defines the responsibilities of the employees and the corresponding financial activities;
- structures and responsibilities – it refers to the defining, attributing and communicating of the structures, responsibilities and environmental authorities necessary for implementing of the SMM. In this purpose it is designated a representative of the organization's management responsible with the environment's protection. The making aware of, motivating and supplying of knowledge corresponding to the personnel is made through specific training programs.
- The integration of the environmental management in the organization's

general management – includes procedures for the inserting of the environmental requirements in every sector specific to the company (ex: supplying, marketing, research-development, production, financial service etc.).

- monitoring, measurements and recording procedures necessary to record and underline on the base of documents the results of the enterprise's actions;
- preemptive and corrective actions, established for eliminating the existent or potential causes regarding the nonconforming with the initially established objectives/targets;
- the SMM audit – consists of the establishment and maintaining of the SMM auditing programs with a frequency dictated by the operation's nature;
- the analysis of the Environmental Management – consists of the estimation made by the general manager on every significant SMM aspects, for identifying the necessity of possible system changes.

As result of the analysis of the organizations' activity which have implemented and correctly conducted SMM can say that, besides the fact that the environmental law has been respected, the benefits brought by this system fully justify the costs with the elaboration, implementation, monitoring etc.. Among the advantages given by the SMM implementation in an organization we mention:

- On an operational plan:
  - ◆ it facilitates the obtaining of the functioning authority;
  - ◆ it eliminates the possible conflicts which appear between the national environmental standards through the introduction of an international standards;
  - ◆ it identifies and corrects the eventual problems on the internal plan, before they are noticed from the exterior;
  - ◆ it determines a greater implication of the employees in the firm's activity, in the resolving of the environment's protection aspects, as well as those of another nature;
  - ◆ it helps the developing and transfer of technologies.
- The relation with clients/possible beneficiaries:
  - ◆ the products/services reply to the national and international environmental requirements;
  - ◆ offers trust to the potential beneficiaries/business partners regarding the firm's capacity to respect the current laws, to insure a clean, healthy, safe surrounding environments;

- ◆ through the commercialized “green” products, the society occupies a new market segment, obtains profit;
- ◆ the SMM certification insures an image favorable to the firm, which leads to the improvement of the competitiveness on the international market.
- Financial sector:
  - ◆ it insures the lowering of the consumption of raw materials, auxiliary materials, fuel, energy etc., which leads to the lowering of production costs;
  - ◆ it lowers, or even eliminates the costs generated by the incomprehension of the national and/or international environmental standards;
  - ◆ it facilitates the relation with insurance firms, banks, potential investors;
  - ◆ it determines the lowering of the responsibilities and environmental risks.
- Reglementations:
  - ◆ it insures a proactive environmental program;
  - ◆ it demonstrates the engagement of the firm's management with the governmental authorities, for conforming and continuous improvement.
- Environment's protection:
  - ◆ the lowering of the impact on the environment through: the lowering of the consume of prime materials and energy; lowering of the emissions in the air, water, ground; lowering of the quantity of waste; recycling of the packages; lowering the noise etc.

As in the case of the Quality Management System, and in the one of the elaboration and implementation of the Environmental Management System, there are some principles (ISO 14001):

- ✓ **Principle 1. Engagement and policy** – “it is recommended that the organization define its Environmental policy”.
- ✓ **Principle 2. Planning** – “it is recommended that the organization establishes a plan for accomplishing its Environmental policy”.
- ✓ **Principle 3. Implementing** – “it is recommended that the organization develops its action capacities and its support mechanisms necessary for the realization of its environmental policy, objectives and targets”.
- ✓ **Principle 4. Measurements and estimates** – “it is recommended that

the organization measures, supervises and estimates its environmental performance”.

- ✓ **Principle 5. Analysis and improvement** – “it is recommended that the organization continuously analyzes and improves its own environmental management system, having as objective the improvement of its global environmental performance”.

The European reference document of the implementation and certifying of the SMM is represented by the Directive nr 761/2001/EC (EMAS II) of the European Parliament and Council, adopted in March 19 2001.

The Environmental Management System implemented in conformity with ISO 14001 can be certified on the base of the statements of the ISO/IEC 66:1999 Guide (*The general requirements for the estimation and certifying/registering organisms of the Environmental Management System*) and of the EA-7/02:2000 (*Directing lines for the accrediting of the certifying organisms of the Environmental Management System*) which establish the requirements for the accreditation of the SMM certifying organisms, as well as for the SMM certifying requirements. These two norms are imposed by the European Cooperation of Accreditation (ECA) for the realization of the SMM certifying.

For an environmental management system to facilitate the decisions, respectively the elaboration of the strategic provisions, of the development concepts, designing, manipulation packaging, distribution and commercialization without negative effects on the environments, together with it, there must exist, respectively put in practice, certain instruments of the environmental managements, which will help to the resolving of the problems in the conditions of respecting the requirements of a durable development.

Through the years there have been used numerous managerial environmental design instruments, for the improvement of the system of taking decisions, as well as for the informing system of the lead managements or for other personnel categories.

Starting from these SMM particularities, but also from the current environmental regulations and from the global policy regarding the environment's protection, and keeping in view the specific of the unfolded activity, at the level at which it is placed, by the general management's policy, each organization elaborates their own environmental management system, an adequate environmental policy, for making the best out of the benefits, for the firm, as well for the environment, for the population.

## Conclusions

Starting from the principles which are at the base, from the objectives which are kept in view, it can be said that the Environmental Management System is an identification and resolving instrument of the problems specific to the environment, which can be implemented in a company in different ways, depending on the existing conditions specific to their level.

The integration of the problems linked to the environment's protection in the frame of the general management system of the organization can contribute to the effective implementation of the SMM, as well as to the making efficient and clarifying of the attributes on the whole personnel's level.

Any SMM must help an organization to adapt as fast as possible and with minimal costs to the changes generated by the changes made to the environmental laws' modification or from other factors.

Moreover, SMM is considered an organizing frame which should be continuously supervised and periodically analyzed for leading in an efficient way the activities linked to the environment of an organization as a response to the changes of the internal and/or external factors.

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