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ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

ISO 14001 AND EMAS

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ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

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Environmental Management Systems (EMS) are **management tools for companies and other organizations that allow improving their environmental performance**. Companies are increasingly interested in reaching and demonstrating an adequate environmental performance of their activities, as well as in ensuring that their behavior not only complies with environmental legislation, but will also continue doing it in the future. An effective way to develop and implement an environmental policy in a company, in addition to any given objectives and a strategy for continuous improvement, taking into account legal requirements and the environmental performance of the company itself, is by establishing and maintaining an Environmental Management System (EMS).

Public credibility and reliability of EMS can be ensured by external and independent processes of registration and verification (e.g. **EMAS**) or certification (e.g. **ISO 14001**).

EMAS¹ (Eco-Management and Audit Scheme) is the European Union system in which companies and other organizations can participate on a voluntary basis. For an organization to join the EMAS registration, the company and its EMS must meet the requirements set out in **Regulation (EC) No. 1221/2009**¹. This register is managed by the competent bodies appointed by the Commission in each Member State. EMAS organizations are recognized by the Commission under this logo, which ensures the accuracy of the environmental information they provide.



ISO 14001² is a certifiable international standard. This standard specifies in its Section no. 4 the requirements that must meet the EMS of any given company for its certification by an accredited body.

The requirements of the EMS demanded by EMAS and ISO 14001 are very similar. In fact, EMAS establishes as its requirements the ones demanded by section 4 of the standard ISO 14001, adding some additional requirements and aspects, related to environmental analysis, legislation, environmental performance, involvement of the workers and communication. EMAS is considered an environmental management system more "demanding" than the one proposed by ISO 14001.

On the other hand, it should be remarked that EMAS and ISO 14001 systems are not the only ones available for the implementation of an EMS. There are other systems, some of which are also certifiable, such as **EKOSCAN Standard**³ driven by **Ihobe**⁴ (*only in Spanish*). This system is

¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:342:0001:0045:EN:PDF>

² http://www.iso.org/iso/catalogue_detail?csnumber=31807

³ <http://www.ihobe.net/Paginas/Ficha.aspx?IdMenu=bef3bb6c-135a-41fd-bef6-129ffeb6881e>

⁴ <http://www.ihobe.net>



specially designed for SMEs, in order to allow them to manage the improvement of their environmental performance in a simplified & practical way, while obtaining immediate results, as well as it has been designed as a possible first step towards reaching EMAS or ISO 14001.

Assessment of environmental aspects

One of the most special concepts and requirements, and at the same time, more important, of EMAS and ISO 14001, is the one related to **environmental aspects**. Environmental aspects are defined as part of the activities, products or services of an organization which can interact with the environment. Therefore, an **environmental aspect** is something that an activity, product or service "pulls" or "emits" to the environment (e.g. consumption of energy, raw materials, water, etc. or emissions, spillages, wastes, noise, etc.), and that has or can have an impact on it.

A very intuitive way to understand this concept is to consider the space in the activities are performed as a "sphere", in which everything that comes and everything that leaves, except for own products or services, must be considered as an environmental aspect.

The EMS is established, implemented and maintained depending on the significant environmental aspects (*i.e. those that have or may have significant impacts on the environment*). In short, environmental aspects organize the whole system, starting at a minimum legal compliance. It is definitely a very important concept for the EMS to be effective.

Companies tend to have difficulties in establishing a system which allows them in an objective but also helpful way, the assessment and comparison of their environmental aspects. EMAS and ISO 14001 do not propose any specific method.

PUBLICATIONS

EMASeasy⁵ (Heinz Werner Engel, 2008)

EMASeasy is a publication outlining a methodology proposed for achieving the objectives of EMAS (and/or ISO 14001) "in ten days, with ten people and in ten pages" and where the whole work process consists of thirty steps. This methodology is based on the concept of **Eco-mapping**⁶, in which different eco-maps are used to clarify and visualize environmental problems within a company. The different maps (air, energy, waste, etc.) create a useful set of graphic information, which is structured in multiple layers and immediately lead us to environmental action programs.

This publication is available in different languages, and can be downloaded free of charge at the website of EMASeasy, by registering previously.

SME Toolkit - EMAS Toolkit for small organisations⁷ (EMAS – European Commission)

This is a practical online guide about EMAS (EMAS regulation in 2001), for SMEs. Its access is made through the European Commission's website dedicated to EMAS; the guide can be specifically found at the Tools/SME-corner section. This guide is organized into sections, where EMAS requirements for an EMS will be addressed in a simpler way. Explanations are illustrated with examples, references, supporting documents, etc.

⁵ <http://www.emas-easy.eu/>

⁶ <http://www.ecomapping.com>

⁷ http://ec.europa.eu/environment/emas/index_en.htm



Manual IHOBE ISO 14001: Operativa de implantación⁸ (Ihobe, 2000)

Practical manual for companies interested in implementing ISO 14001 standard (version of 1996). This manual sets the steps which will have to be followed in the certification process. The manual has been used in a very successfully way in several Basque companies. *It is only available in Spanish*

LEGAL TEXTS

[EMAS Regulation¹](#) (Regulation (EC) No. 1221/2009)

[ISO 14001:2004²](#) (Environmental management systems - Requirements with guidance for use)

RECOMMENDED LINKS

[EMAS: the Community Eco-Management and Audit Scheme⁹](#) - This is the official website for EMAS of the European Commission. It contains plenty of information, documents, tools, links, etc., as well as an specific page for SMEs (SME-corner) in which two tools are introduced: **EMASeasy** and **SME Toolkit**.

NOTE: You could obtain more detailed and practical information about EMAS by contacting and consulting with the competent national or regional environmental agency.

⁸ <http://www.ihobe.net/Publicaciones/Ficha.aspx?IdMenu=750e07f4-11a4-40da-840c-0590b91bc032&Cod=8e68c2c9-3d19-4c9e-a2ff-da108ce7c00e&Tipo>

⁹ http://ec.europa.eu/environment/emas/index_en.htm