

# Implementation of standardised environmental management systems in Swedish local authorities: reasons, expectations and some outcomes

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## Abstract

Environmental issues have become increasingly important in Swedish local authorities during the last decade. This has been shown as almost half of the local authorities are implementing environmental management systems (EMSs) in their organisations as a voluntary commitment to improve their environmental efforts. In the autumn 2000, a national postal survey to learn more about EMS implementation in Swedish local authorities was carried out. The purpose of this paper is to examine the reasons behind Swedish local authorities' EMS implementation, what the local authorities expect EMS implementation to bring to their organisations, what environmentally related outcomes they have observed, and how the EMS work is co-ordinated. Although Swedish local authorities often have ambitious plans for EMS implementation, few resources are allocated for this purpose, which means, in fact, that EMS implementation is not a high priority. Our study showed that the chief reason for implementing EMSs was of organisational origin (such as bringing order to the environmental efforts), although EMS implementation is often viewed as an environmental project. This paper also discusses the problems surrounding the fact that EMSs are viewed as projects and not as continuous processes that are integrated into the organisation.

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## 1. Introduction

Since the United Nations' conference in Rio de Janeiro in 1992, local authorities in Sweden have shown an increased interest in voluntary environmental commitments in order to decrease the negative environmental impacts caused by their organisations and activities, and to further the process of sustainable development (Brundin and Eckerberg, 1999). A considerable number of tools, all with more or less different approaches, are available for the purpose of making the organisations more environmentally proactive and efficient. These tools can provide the organisations with information about the environmental situation, help improving the structure of environmental work and support the environmental decision-making process. Substance flow analysis, strategic environmental assessments, environmental impact assessment, life cycle assessment, and standardised environmental management systems (EMSs) are just a few of the tools available for these purposes. These tools may improve the work directed at sustainable development, as they elucidate various aspects of the environmental perspective. However, it

is important to remember that none of them represents a universal solution, thus other strategies, tools and methods that include political, social and economic components should be used as well to fully address sustainability (Steger, 2000).

This paper focuses on one of the above mentioned tools: EMSs. There are different types of environmental management systems, and standardised EMSs are designed according to the principles of the international standard ISO 14001, the EC regulation eco-management and audit scheme (EMAS) or any that are similar to them. The main purpose of this type of EMS is to organise environmental work in such a way that an organisation's environmental performance improves on a continual basis. To achieve this goal, the organisation maps its environmental impact and identifies the significant environmental aspects of its organisation in an environmental review (ISO, 1996). Consequently, the organisation formulates a policy regarding its environmental ambitions. The environmental policy is the central document in an EMS because it sets the organisation's ambitions and reflects its overall principles in the environmental work. The policy, which has to be publicly available, should provide a framework for the environmental improvement process and should include commitments to comply with relevant environmental legislation, commitment to continual improvements, and it should be a basis for setting targets and objectives. Environmental targets and objectives are set along with programmes

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to enhance that they are fulfilled. The EMS process also involves training staff and establishing routines and procedures designed to increase the chances for success in attaining environmental targets and objectives. During the audit, an important step in the EMS process where the EMS is evaluated, the appropriateness of the targets and objectives are examined and set in relation to the organisation, along with the established environmental procedures. Often, organisations ask an independent auditor to conduct an environmental audit. When following the standard ISO 14001 or the EC regulation EMAS, the organisations can choose a validation by a third party to certify and/or verify their EMSs. When implementing EMSs, the organisation must change or adapt to this new scheme in order to integrate environmental issues and thinking into daily work. Furthermore, co-operation, even distribution of power and an open decision-making process that includes many stakeholders, should be part of integrated environmental management (Born and Sonzogni, 1995). Without support from the management, including political decision-making and support from politicians, it is very difficult to integrate environmental issues into an organisation (Bühns, 1991). Implementation of EMSs in the organisations of Swedish local authorities is fairly common, although certification or registration by a third party is not a universal goal (Emilsson and Hjelm, 2002). Studies from different countries indicate that departments within the technical sector in the local authorities are the most typical for EMS implementation (Emilsson and Hjelm, 2002; Cockrean, 2001; Bekkering and McCallum, 1999; Honkasalo, 1999). In addition, there are indications that EMSs similar to ISO 14001 or EMAS are better suited for these kinds of departments, as they often resemble industrial organisations (Emilsson and Hjelm, 2002; Darnall et al., 2000).

EMS implementation in Swedish local authorities is a current issue, evident from the fact that almost half of the local authorities have undertaken this type of proactive environmental work (Emilsson and Hjelm, 2002), although there is little general academic knowledge of this phenomenon regarding Swedish conditions. The purpose of this paper is therefore to increase understanding of the use of EMSs in Swedish local authorities by providing a description and basic overview of EMS endeavours that have been made there. The paper outlines the main reasons for EMS implementation. Other important issues studied are environmental related expectations and noted outcomes from EMS implementation, and how the EMSs work is co-ordinated. Together, these issues provide a knowledge baseline of current EMS activities in Swedish local authorities which is important and valuable for further and deeper studies in the area.

This is the second paper based on a postal survey of Swedish local authorities in the autumn of 2000. The overall aim of the survey was to acquire general comprehension and knowledge of EMS implementation in Swedish local authorities. The questionnaire included both quantitative and qualitative questions. The quantitative questions dealt

mainly with the widespread use of EMSs in Swedish local authorities, what standards, if any, are used, and whether certification and/or registration is a goal. These questions are analysed elsewhere (see Emilsson and Hjelm, 2002).

## 2. Method

In autumn 2000, as part of a postal survey, questionnaires were sent to all of the 289 local authorities in Sweden. They were sent to the central environmental managers, or their equivalents, in the local authorities. The survey generated a return rate of 81%, which means that there was a considerable amount of data to be analysed. Therefore, the data were divided into two groups, qualitative and quantitative, and presented in two papers. For more results from the postal survey and for a more detailed description of the method used, see Emilsson and Hjelm (2002).

Almost half (107) of the local authority respondents replied that they are implementing EMSs in one or more of their departments, and the results presented in this paper are based on answers from these 107 authorities. All the questions analysed in this paper are open-ended, and it should be noted that in some cases, the local authorities gave more than one answer to the same question. In compiling and analysing the data, it was found that the local authorities had given answers that were closely related, despite the fact that the questions were open-ended. It was, therefore, possible to categorise the answers into different groups (see Tables 1 and 2).

Since the 2000 survey, the local authorities have gained new experience in this field, and it is possible that their answers would be different if the same questions were asked today. Consequently, the results from this study are only valid for Swedish local authorities during the autumn of 2000. Although a postal survey was considered as the most appropriate method for this kind of study, it is not without weaknesses. For example, the views of only one person in each local authority are represented which means that the answers could be biased. Furthermore, in some cases, questions were not answered by all of the local authorities that participated in the survey.

## 3. Reasons for EMS implementation

The local authorities were asked why they had chosen to implement EMSs in their organisations and it was possible to distinguish six categories among the answers: “organisational reasons”, direct environmental “reasons”, “set a good example and marketing reasons”, “political reasons”, “a step in the Local Agenda 21 process” and “financial savings” (see Table 1). The first three categories include a number of sub-categories. The largest category of answers is “organisational reasons”, as 61% of the local authorities gave answers that can be included here. This category con-

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