ARE STANDARDIZED EMSs USEFUL IN LOCAL AUTHORITIES? A STUDY OF HOW A TOOL FROM THE PRIVATE SECTOR IS USED IN THE PUBLIC SECTOR

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Following the trend in the private sector, standardized environmental management systems (EMSs) have been introduced in several local authorities around the world. When the tool is transferred from the private sector to the public, one can ask how useful the tool is in the new environment, since the private and the public sectors are two different types of social sphere, with different institutional logics. Taking a closer look at the situation in Sweden, this paper aims to investigate the applicability of standardized EMSs in local authorities and the public sector in general. Based on qualitative interviews with public officers in two municipalities in Sweden, it is argued that EMSs are useful in municipalities. However, the study

also reveals that an EMS seems to be more suitable for technical service administrations and municipally owned companies than social service administrations. Copyright © 2004 John Wiley & Sons, Ltd and ERP Environment.

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INTRODUCTION

Environmental management systems (EMSs) such as the international standard ISO 14001 or the European Eco-Management and Audit Scheme (EMAS) are used in the private sector to organize the corporate environmental management efforts of companies. As a new management technology, the standard EMS has been designed to fulfil the goals and means used in the private sector. Following the trend in the private sector, the standard EMS model has recently been

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introduced in the public sector, at the national government level (Honkasalo, 1999) as well as the local government level (von Malmberg, 2003). For instance, a recent study carried out in Sweden shows that in 2000 nearly half of the Swedish local authorities had begun working with an EMS in some or all of their municipal administrations (Emilsson and Hjelm, 2002). The study also showed that approximately one-quarter of the Swedish local authorities without an EMS had plans to implement an EMS in the future. The intention is to restructure and make environmental management in public organizations more effective. However, this transfer of management technology from the private sector to the public sector raises questions about the reasons for implementing an EMS and the roles and effects of an EMS in public sector environmental policy and management (von Malmberg, 2003). The private and the public sectors represent two different types of social sphere, with different institutional logics (Forssell and Jansson, 2000), and mindful of research in new public management (e.g. Jacobsson, 1994; Hood, 1995; Rombach, 1997; Lantto, 2001) there are reasons to believe that the use of EMSs in the public sector may not be entirely positive for public environmental policy and management. With the expectations for local governments and authorities to play an important role in the transition towards sustainable development, expressed for instance in the Agenda 21 document of the Rio Earth Summit, it is of particular interest to analyse the use and potential of EMSs in local government and authorities (cf. von Malmberg, 2003).

Taking a closer look at the situation in Sweden, the purpose of this paper is to investigate how the use of a standardized EMS affects environmental management in Swedish local authorities. It will also analyse the functionality and applicability of standardized EMSs in local authorities, and to some extent the public sector in general. The following questions are used to guide the analysis.

- What are the effects of using standardized EMSs on environmental management in local authorities?
- Does the institutional logic of local authorities influence the usability of standardized EMSs?

Based on the results, the paper will also give some recommendations as to how to develop EMSs to fit better local authorities.

NOTES ON THE METHOD

Since implementation of EMSs in relation to municipal environmental management is a relatively new phenomenon it is also quite an uninvestigated area. There are only a few studies investigating what effects an EMS could have on the environmental management in municipalities (von Malmberg, 2003), and there is a need for more basic knowledge of the possible and actual effects. Thus, the research underlying this paper has been exploratory. The study builds on qualitative interviews with public officers of two municipalities in southern Sweden: Eskilstuna and Kalmar. The reason for selecting only two municipalities is that a small number of in-depth qualitative case studies would yield better knowledge of the phenomenon than a shallower survey in a larger number of municipalities. The case study approach makes it possible to gain a deeper understanding of the use of EMSs in local authorities. As mentioned, there has been a survey study of the use of EMSs in Swedish municipalities (Emilsson and Hjelm, 2002), but this study did not even touch upon the questions addressed in this study.

The reason to choose two municipalities, and more particularly Eskilstuna and Kalmar, was the need for a broader basis than a single case study would have provided. The two municipalities were chosen based on criteria that they are both working with EMSs, and that they are situated in the southern part of Sweden, the latter criterion being a practical one. Moreover,

Table 1. Municipal administrations represented in the study

Kalmar	Eskilstuna
Child and youth care administration	Child and youth care administration
Municipal executive administration	Torshälla district council (2 persons)
Spatial planning administration	Municipal executive administration (2 persons)
Real estate and procurement administration	Eskilstuna Energi & Miljö AB (municipal energy and waste management company) (2 persons)
Harbour administration	
Kalmarhem AB (public housing company)	
KVR AB (municipal water and waste management company)	

the two municipalities were chosen using theoretical replication logic (Yin, 1994) of case study methodology. This means that the two cases were expected to produce contrasting results for predictable reasons. Kalmar is one of the pioneering municipalities in Sweden when it comes to the use of EMSs in local authorities, and the Swedish Association of Local Authorities has marketed Kalmar as a role model for others to follow (SALA, 1998). Eskilstuna, on the other hand, took on an EMS much later than Kalmar, and from early contacts with politicians and officers in the municipality it was known that there is a scepticism towards the tool within the authority. With two different cases, assumed to give different pictures of the situation, the explorative approach of the research will be met.

The interviews were based on a manual, which consisted of a number of questions chosen to give an overarching view of the EMS's effect on the environmental management in the municipal administrations. The questions touched upon the following areas: EMS practice (what standard and why and how it is used); changes in structure and organization as consequences of the EMS; changes of environmental goals as consequences of the EMS; changes in planning and decision-making as consequences of the EMS; changes in daily work and routines as consequences of the EMS; environmental information and education; perspectives on the future and summarizing questions on the effects of using the

EMS. Not all the questions in the manual were used during every interview; instead, the questions were adjusted to fit the different municipal administrations. In all, seven public officers from each municipality were interviewed. These persons were selected because of their knowledge of the municipal administrations' environmental work. The municipal administrations represented (Table 1) were chosen because they had used EMSs for the longest periods of time. Both technical service administrations and social service administrations were represented in the study, along with a few municipally owned companies. The municipal administrations in the study use either one or both of the standards ISO 14001 and EMAS.

Data collected through interviews was interpreted and analysed by a combination of partial and overall comprehensive analysis, following the method as described by Holme and Solvang (1997). The analytical framework consists of the overall aim of the study, the theory and the interview manual. First, the answer of every respondent to each question was studied and patterns were sought using questions such as 'what have they answered?', 'are there any similar answers?', 'are there any systematic relations between the answer and the affiliation of the respondents?' and 'are there systematic relations between the answers and the temporal perspective of EMS use (i.e. how long the EMS has been in use)?'. Second, general patterns in the material were looked for in relation to the overall aim of the study.

Table 2. Experienced advantages and disadvantages of EMS use in local authorities

Advantages	Disadvantages
More distinct structure	A larger amount of administrative work
Better defined liability among officers	A lot of time is used to develop the EMS
Clearer information	A lot of time is used to support and maintain the EMS
That environmental thoughts have been implemented in the planning of the work	It is hard to establish the EMS in the organization
That environmental thoughts have been implemented in the daily work	There is a risk that the EMS becomes too detailed and hard to keep functional
Greater awareness of environmental issues	Sometimes the advantages the EMSs has brought to the caring, social service administrations can be reached in simpler ways
Clearer accounting	Sometimes the certification gives more expenses than income, both economic and in other areas
Simpler communication towards participants	

Third, the material was analysed in relation to the theoretical perspectives of new institutional organization theory, as presented below.

WHAT ARE THE EFFECTS OF USING STANDARDIZED EMSs ON ENVIRONMENTAL MANAGEMENT IN LOCAL AUTHORITIES?

According to the interviews, the EMSs have led to some advantages and disadvantages for environmental management in the local authorities (Table 2). However, the general experience of the respondents in both municipalities is that the local authorities' environmental management, as a whole, is functioning better since the EMSs have been implemented.

DOES THE INSTITUTIONAL LOGIC OF LOCAL AUTHORITIES REDUCE THE USABILITY OF STANDARDIZED EMSs?

New institutional organization theory encompasses the idea that all organizations are depending on support and legitimacy in their surroundings for survival (Scott, 2001). It is, for example, necessary for an organization to have

a good reputation if it wants to get new customers. This striving to legitimize the organization's existence and actions is fundamental for organizations in both the private and the public sectors, but what is seen as legitimate differs in different organizations.

New institutional organization theory suggests that the code for what is seen as legitimate is created in the interaction between the organization and its surroundings. These codes are defined by the organization's nearest surroundings, the society and the group of organizations that the organization cooperates with (Scott, 2001). Theorists within the new institutional organization theory consider that there are created socially constructed and commonly accepted codes for what organizations' images should be like, in which spheres of society the organizations take part and rules for interaction between and within organizations (DiMaggio and Powell, 1991). An example of this is a kiosk, where the expectation of the public decides the company's image, the services it provides and what opening and closing hours it has. If the kiosk does not fulfil the expectations, it will be harder for it to become accepted as a kiosk, but a successful change in, for example, the services it provides can also lead to a change in the definition of a kiosk.

Table 3. Characteristics of the three social spheres of society (modified from Forssell and Jansson, 2000, reproduced by permission of Liber AB)

	Private sector	Public sector	Civic sector
Organization	Company	Administration	Association
Principal	Owner(s); shareholders	Public authority	Members
Purpose	Yield profit; satisfy owner/ shareholder interest	Execute decisions; law and justice	Satisfy the common interest
Target group	Customers	Citizens	Members
Relation	Occasional	Compulsory	Voluntary; durable
Mode of exchange	Market transaction	Redistribution	Redistribution; participative democracy
Financing mode	Revenues	Taxes	Charges; allowances
Basic norm	Efficiency	Justice	Democracy

The two different types of organization referred to in this study are described theoretically in Table 3. The local authorities are a part of the 'public sector' group. The EMS tool has been developed in the 'private sector' group. In addition, there is the 'civic sector': the community. As discussed by Montin (1993), municipalities as a whole can be viewed from all three perspectives, and thus constitute a mix of all three spheres. When viewed as a part of the political sphere (the public sector), the role of the municipality is that of a legal system, which aims to implement political goals and fulfil requirements on equality and legal rights. This is in essence the traditional role of local authorities. When viewed as part of the private sector, municipalities play the role of a service provider and/or producer, which aims to provide/produce services in the most cost-efficient and effective way. The municipally owned companies are a mix of both the public and the private sector. When viewed as a local community, the role of the municipality is that of an autonomous civil society that aims to satisfy the common interest while fulfilling requirements on democracy and possibilities of influencing decisions. This study focuses upon the municipality from the perspective of the public sector in particular, but also from the perspective of the private sector. As mentioned, EMSs are implemented in local authorities and municipally owned companies.

A company can use an EMS as an advantage in its competition with other companies. A well functioning environmental management activity can give several advantages because it raises the customers' trust in the company. The local authorities have no competition. Does this mean that local authorities have nothing to gain from a well functioning environmental management system? If this is so, why are they using EMSs? To answer this, it would be wise to study what legitimize the use of EMSs, and especially look into the codes that separate the private and the public sectors.

Based on general arguments of new institutional organization theory, it is assumed that an important reason that private sector actors use EMSs is to acquire new customers and to create stronger ties with old customers (cf. Prakash, 1999; Bansal and Bogner, 2002). This would happen when the public expects that an EMS bring a number of advantages to the company. A few of these advantages are that the organization obtains a good reputation, it manages to comply with the environmental rules and regulations efficiently, the company becomes purposed and structured and the organization is seen as progressive and responsible.

In comparison, an important reason for implementing an EMS in the public sector is that the public sector wants to influence its surroundings by setting a good example

(Emilsson, 2002, p. 22). The EMS would make the public sector gain many of the same advantages as the private sector, e.g. more effective environmental management, but here one can see a difference between the types of organization in the public sector and the private sector. The advantages the private sector obtains from an EMS are not relevant for the public sector. This is because the public sector does not strive for the same goals as the private sector. Instead, the public sector is expected to obtain a number of different advantages. A few examples of these are that the public sector is expected to maintain law and justice, implement political goals such as environmental rules and regulations (e.g. by controlling private companies by means of supervision), perform ideological actions, set a good example and use the public resources in an effective way.

Accordingly, we believe that the public sector and the private sector use EMSs for different reasons, but it also appears as if the EMS is functioning in both types of organization. One explanation can be that the public sector organizations reach their goals by taking a tool from another sphere (the private sector), and then use the tool in its own sphere. We think this action leads to the public sector actors obtaining a common language with the private sector actors and in this way can more easily affect the private sector, which was a goal with the EMSs (cf. von Malmberg, 2002, 2003).

However, there is a hitch in the theory above. How can the public sector affect the private sector when the public sector does not fulfil the goals that the private sector has with the EMS, i.e. acquiring new and keeping old customers? This is an interesting contradiction since the public sector according to the theory does not have any real customers or competitors. Of course, people that use the services produced or provided by the local authorities can be seen as customers, but this view is not coherent with the theoretical view of a local authority as a public authority. Nevertheless, this is not apprehended as a problem in prac-

tice, since the public sector, instead of reporting effects on the number of customers, can show that the EMS brings a number of other advantages (e.g. the organization obtains a good reputation, it manages to comply with the environmental rules and regulations, the work becomes purposed and structured and the organization is seen as progressive and responsible). The conclusion from the discussion is that the EMS tool can be taken from the private sector and then used in the public sector since the EMS tool does not strive to either maintain or counteract the codes in the two sectors. Hence, we do not think that the institutional logic of local authorities decreases the possibility of using standardized EMSs in the public sector.

However, this conclusion might just be a consequence of the institutional and organizational changes that have taken place in society in the last decade, something that has been discussed as 'new public management' (NPM) reforms (see, e.g., Hood, 1995; Rombach, 1997; Lantto, 2001). In a time that sees government-by-objectives, out-contracting, purchase/provider models, compulsory competitive tendering and public procurement as natural parts of day-to-day practice in local authorities (Jacobsson, 1994; Blomquist, 1996), it might be hard to find empirical evidence for the theoretical characterization of the public sector and thus municipal administrations and their institutional logics as something different from the private sector and its companies. Is it maybe so that the institutional logic of local authorities in reality is similar to the institutional logic of companies? With the NPM reforms, the private sector perspective on municipalities as efficiency-seeking service providers has come to dominate over the public sector perspective of municipalities as public administrations striving to implement political goals and fulfilling requirements for equality and justice (cf. Blomquist, 1996; Rombach, 1997). The reference to people using services provided by the local authority as customers gives evidence for this. If local authorities are run as companies,

and citizens have become customers, then it is no surprise that we cannot find empirically any institutional obstacles for the use of EMSs in local authorities.

IS THE STANDARDIZED EMS FUNCTIONAL IN LOCAL AUTHORITIES?

As mentioned earlier, the general experience in both municipalities is that the use of EMSs has been positive for environmental management as a whole. However, it appears also from the interviews that the functionality of the standardized EMS in local authorities depends on which municipal administration is using it. According to the answers, EMSs seem to be functioning well in the producing, technical service administrations and the municipally owned companies, but they do not seem to be functioning so well in the caring and social service administrations. An example is when a school is using an EMS. Among other things, problems can arise with the liability. The principal has the main liability, but who is responsible for the daily work? It is the employees that mainly control the environmental impacts and aspects in a producing company, but it is both the employees and the students that affect the environmental work in a school. One can also look at the students as products of the work. One way to split the responsibility for the environmental work could be to hold both the teachers and the students responsible for the direct environmental aspects, but to hold only the teachers responsible for the indirect environmental aspects, since it is the teachers who by their pedagogies can affect the indirect environmental influence which is the result of the students' knowledge and set of values. It is hard to compare a school with a manufacturing company and the problems mentioned above are an example of this. One can also ask oneself whether an EMS is useful in a school. In this study, the persons interviewed have said both that the EMS is

functioning well in the caring and social service administrations and that the EMS is not functioning. Thus, the functionality of an EMS in the caring and social service administrations seems to depend on which municipal administration it is used in, how the administration is organized, the employees' attitude to EMS, the employees' understanding of EMSs and the interpretation of the standards. One problem mentioned in the study was that lack of resources in the organization made the EMS look like a waste of resources since an EMS sometimes brings more costs than benefits.

Almost every one of the persons interviewed thought that the EMS was a functional tool, but they also said that the EMS standard must be adjusted to fit the different fields of action. For instance, the caring and social service administrations have, in comparison to producing and technical service administrations, relatively more indirect environmental aspects to handle, and these are difficult to handle with EMSs of today. Therefore, we think the standards, or rather the guidelines; need to be developed or changed to better fit in the caring and social service administrations.

Certification of the EMS is a natural part of the EMS standards. There are no demands that an EMS must be certificated, but if an organization uses a standardized EMS the certification is seen as a natural step in the process. Most of the municipal administrations in our study have chosen to reach a certifiable level on the EMS, but not to certify the EMS. This tendency is also seen in the study by Emilsson and Hjelm (2002). Only 35% of the local authorities in Sweden using a standardized EMS had certified or planned to certify their EMS. This phenomenon was also seen in a case study of EMS implementation and use in the Swedish municipality of Västerås (Burström, 2000a). In Västerås the local administrations had decided to use the ISO 14001 standard, but they had no intention of certifying their EMS. This raises the question of why the local authorities chose to reach a certifiable level without taking the

final step of certification. One explanation is that the municipal administrations need a legitimate tool for their internal environmental work, but that they do not want to invest the extra resources needed for a certification (or a registration if they are applying EMAS). This is a contrast to the situation in the private sector, where most of the companies that reach a certifiable level would certainly certify their EMS. An explanation of the difference is that the companies in the private sector compete with each other and that they look at the certification as a way to gain an advantage over the other companies. Except for the municipally owned companies, local administrations have no real competition and, therefore, they have no or little need of the advantages a certification would bring. This would also explain why the municipally owned companies certify their EMS more often than the municipal administrations. The conclusion drawn from the discussion above is that it does not seem that the municipal administrations need to certify their EMSs. This is not a serious problem since the EMS tool is functional even without the certification step; in fact, less focus on certification may give more room to focus on the processes of EMSs and consequently to more successful environmental management, including communicative action and organizational learning (von Malmberg, 2002, 2003).

HOW CAN THE STANDARDIZED EMS BE CHANGED INTO A BETTER FUNCTIONING TOOL FOR THE LOCAL AUTHORITIES?

The persons interviewed were generally content with both their own EMS and the EMS standards, but they had a few wishes about how the EMS could be changed into a better tool. They asked for the same changes both for their own EMS and in the EMS standards. This is probably because the persons interviewed have experience of the problems occurring in

the work with their own EMS and therefore request these changes for the EMS standards as well. Our study has revealed a need for three different changes of the EMS standards, or the guidelines for using the standards in local authorities, so that EMSs could function better in the local authorities.

The first change requested by municipal officers is to simplify both the own EMS and the standards themselves. Some of the informants have experienced that the standards are too extensive and too burdensome to use in the local authorities. Therefore, they require a lighter version of the standards for the local authorities. One explanation to this demand is that an office seems to have much less environmental impact than a factory in the process or manufacturing industry. Another explanation is that some of the municipal administrations have no intention of certifying their EMS; they only want to use it as a tool in their internal environmental management. In all, this demand seems to be similar to the earlier demands for light versions of ISO 14001 or EMAS expressed by many small and medium sized enterprises (SMEs). Lessons could be learned from this development, but it should be kept in mind that local authorities and SMEs are different kinds of organization, with different needs. It would hardly be possible to use the same EMS models in both these kinds of organization.

The second change suggested by the interviewees is a unification of the different management systems into one overarching system. Some of the municipal administrations need a management system consisting of environment, occupational health and quality, and have therefore developed their own overarching systems. A common standard for revision of quality management system and EMS has recently been developed, ISO 19011. Moreover, ISO 14001 is at the moment being revised to be more compatible with the quality management standard ISO 9001, something that would lead to the two standards being more similar to each other.

The third change suggested is a development of EMSs to fit the caring and social service administrations better. The persons interviewed questioned whether an EMS is a functional tool in the caring and social service administrations. They also thought that the resources invested in the EMS maybe could be used in a more efficient way. Some persons thought that it was difficult to interpret the standards and transfer them to the caring and social service administrations. They also wanted the standards and guidelines to put more focus on the indirect environmental aspects. In all, this raises the question of whether an EMS is a functional tool in the caring and social service administrations. It seems that the EMS in its original form does not fit very well in the caring and social service administrations. This leads to the next question: whether it is the standard that needs to change or whether a development of the existing standards is enough, perhaps through development of the parts of the standards and guidelines that are connected to the caring and social service administrations, mainly by elucidating the indirect environmental aspects and more numerous examples suitable for offices. A development of the standard in this direction would facilitate the interpretation of the standards in the caring and social service administrations, but the usefulness of EMSs as a tool in the caring and social service administrations may still be questioned.

CONCLUDING REMARKS

The first question discussed in the study was what the effects of using standardized EMS are on environmental management in local authorities. The conclusion drawn from the empirical study and the discussion is that environmental management as a whole in local authorities is better functioning as a consequence of EMS implementation. The advantages an EMS has brought can be summarized as (i) more distinct structure and better defined liability amongst

officers, (ii) clearer information and better communication amongst participants, (iii) that environmental thoughts have been implemented in the planning of the work and the daily routines and (vi) clearer accounting. The disadvantages of an EMS can be summarized as consuming time and an increasing amount of administrative work. Furthermore, the advantages the EMS has brought to the caring, social service administrations can sometimes be reached in simpler ways, e.g. through education and linking environmental issues to quality systems already in place. Sometimes the certification also gives more costs than benefits, both economically and in other areas.

The second question discussed in the study was whether the institutional logics of local authorities reduce the usability of standardized EMSs. The conclusion from the discussion is that the EMS as a tool can be taken from the private sector and then used in the public sector since it neither strives to maintain nor counteract the codes in the two sectors. Hence, we do not think that the institutional logic of local authorities negatively influences the usability of the standardized EMS in the public sector. However, this conclusion might just be a consequence of the institutional and organizational changes that have taken place in society in the last decade, the so-called new public management reforms leading to debate about businessification of the public sector. Is it maybe that the institutional logic of local authorities in reality is similar to the institutional logic of companies? It is no surprise then that we cannot find any institutional obstacles for the use of EMSs in local authorities from our empirical data.

The third question discussed in the study was whether the standardized EMS is functional in local authorities. The conclusion from the discussion is that the EMS is a very functional tool in producing, technical service administrations and municipally owned companies, but that it is not always a good tool in the caring and social service administrations. The caring and social service administrations

to a larger extent than the producing and technical service administrations touch indirect environmental aspects, which are difficult to handle with EMSs of today. Therefore, the standards and/or the guidelines need to be developed or changed for the EMS to fit better in the caring and social service administrations.

Based on the results, and drawing from expectations expressed by the interviewees, a number of suggestions as to develop the EMS to improve its applicability in local authorities have been presented. The first change requested by municipal officers is to simplify the EMS standards, for example into a 'light version' for the municipal administrations. The second change the interviewees suggest is a unification of the different management systems (for example environment, occupational health and quality) into one overarching system. The third change suggested is a development of the EMS tool so it will fit the caring and social service administrations better. Perhaps it is enough to develop the parts of the standards that are connected to the caring and social service administrations, mainly by elucidation of the indirect environmental aspects and more numerous examples suitable for offices, but it is possible that a larger change of the tool is necessary.

Finally, we should mention that our study has analysed the use of standardized EMSs in municipalities as public authorities and to some extent service providers. We have not made any attempt to analyse the use of the tool in municipalities as local communities, and thus the applicability of the private sector tool in the civic sector, with democracy as a basic norm. Given the assertion that local government and authorities would take a lead, not only in the local communities, in the overall work to realize sustainable development (see, e.g., Gilbert *et al.*, 1996; Gibbs, 1998), it would be an important topic for further critical research to analyse how local authorities can work with EMSs and simultaneously meet requirements for democracy and the rights of citizens and members of the local community

to take part in local governance for sustainability (cf. Levett, 1997; Spencer-Cooke, 1997; Burström, 2000b; Andersson and von Malmberg, 2003; von Malmberg, 2003). Any change of existing or development of new EMS models to fit local authorities, and public authorities in general, must consider the institutional logics of and basic requirements on the kind of organization in question. If not, there may be sincere conflicts between basic social values such as democracy, justice and effectiveness.

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