MAKING ENVIRONMENTAL MANAGEMENT SYSTEMS WORK THROUGH A STRATEGIC APPROACH TO DEVELOPMENT AND IMPLEMENTATION

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ABSTRACT

This paper describes how adopting a strategic approach to environmental management systems (EMS) will deliver a long term, lasting change to environmental performance. The paper focuses on the approach of one public sector agency, Transport SA. Whilst Transport SA has had elements of a system for environmental management in place for some time, there was a need to review the existing system in the light of a new direction for the Agency’s environmental performance. A strategic approach has been adopted to improving environmental performance and making an EMS work for the organisation. Some of the critical attributes of this strategic approach are described and contrasted with a compliance based approach to EMS.

INTRODUCTION

With the adoption in Australia, of the International Standard for Environmental Management Systems AS/NZS ISO 14001, “EMS” has been an abbreviation on many peoples lips. Like all standards from the International Organization for Standardization (ISO), an EMS is not mandatory for any organization. However, there are a growing number of Australian companies and government sector agencies who are moving toward Environmental Management Systems (EMS) - some because having an EMS is likely to become more important in doing business internationally, some because it provides a logical way to manage the environmental implications of their business or activities and others because they wish to excel in their environmental performance.

An EMS is - quite simply - a tool for managing and improving the environmental performance of an organization over time. It is about setting the environmental direction for the organization and putting in place the various mechanisms necessary to ensure that direction is achieved.

The International Organization for Standardization (ISO) defines an environmental management system as “the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy” (Standards Australia, 1996).

By 1996, Transport SA (the Agency) had developed processes, responsibilities and procedures, albeit in a fairly ad hoc manner over the last twenty years or so, to manage corporate risk and enhance environmental performance. Transport SA had also developed a corporate plan which recognised the increasing significance of environmental responsibilities for the Agency. Together these components comprised Transport SA’s system of environmental management.

The Agency - in accordance with its corporate approach to strategic planning - developed an Environment Strategic Plan which established a clear, long term corporate environmental direction (Transport SA, 1997; Tideman and Thornton, 1998). The executive committed to the direction established by the Environment Strategic Plan in late 1997. This led in turn for a need to reassess the current system of environmental management and the delivery of environmental services within the Agency.

This paper describes how adopting a strategic approach to environmental management systems will deliver a long term, lasting change to environmental performance.
APPLICATION OF EMS IN THE TRANSPORT SECTOR

One of the early lessons in the development and application of EMS standards is that the scope of an EMS must reflect the needs of a given organization. The specification standard AS/NZS ISO 14001 is highly flexible - the specifications are, of necessity, generic in nature and open to wide interpretation. So, the scope of an EMS can be very different between organisations in terms of the elements, functions or locations it encompasses.

An EMS may apply to a whole organization or to part of it - either by function or location. It is common to find in a large organization that one depot, facility, key activity or division has an EMS in place. Indeed, the European Eco Management and Audit Scheme applies only to individual sites, rather than whole organizations. An EMS can be applied to single contracts or projects; for example, the preparation of Environmental Management Plans for Olympics projects (OCA, no date) or in Transport SA’s Environmental Management Implementation Plans for construction projects (Transport SA, 1997). Although contracts/projects are usually too short-lived to meaningfully consider continuous environmental improvement or system and policy review, adopting a systematic approach and EMS principles is becoming an accepted approach to project delivery. Cumulatively, such contract/project knowledge can significantly enhance environmental planning for future activities.

An EMS may be developed to meet the requirements of AS/NZS ISO 14001, in which case the basic contents and minimum performance levels are determined by the generic standards. If certification of an EMS is sought then the standard specification must be followed and, generally speaking, all elements of the EMS must be in place. Some organizations may choose to develop an EMS which is not designed to comply with any particular standard so in this case the scope of the system may vary widely.

Many of the public sector transport agencies are beginning to establish EMS, building on their existing environmental management processes.

As part of an Environment Review for Transport SA, interviews were conducted in early 1997 with several public sector transport organizations (Mandis Roberts Consultants, 1997). Most public sector road and transport agencies around Australia are addressing the issue of how best to develop an environmental management system. Needless to say each agency is working in a different jurisdictional and organizational context and has different priorities and needs. Therefore each agency is starting at different points, developing different components and struggling with issues like “making systems work”.

However, through Austroads, the national organization which promotes national approaches and practices in relation to roads, the agencies are attempting to focus on ‘sharing the lessons learned’ and learning from one another as each agency finds its way in developing an EMS. Common issues are being identified such as the need for common environmental standards, objectives and criteria, the development of tools to assist in system establishment (e.g. monitoring, reporting and feedback mechanism, training programs etc.), and jointly exploring how contracts can be structured to assist EMS implementation.

In the rail industry EMSs are being developed. In New South Wales, the enabling legislation for the rail sector restructure incorporates ecologically sustainable development and principles of environmental management in requirements for the “new” agencies. Rail Access Corporation (RAC) has an EMS in place and organizations requiring access to the rail infrastructure must put in place an EMS which meets the requirements of the RAC EMS.

A COMPLIANCE APPROACH TO EMS

Many organizations when considering the establishment and scope of an EMS already have elements of an EMS in place usually as a response to an environmental incident or legal issue or requirement; for example, Transport SA have had internal processes for environmental assessment of road projects for about 20 years. The concentration, at Transport SA, on project-level environmental controls presented a burden to projects because often the costs of those controls had not been included in the original project budgets (environment had not been integrated into the investment decision making process) and there were negative connotations associated with the perceived imposition of bureaucratic controls.
This approach is typical of compliance or due diligence driven environmental management - fundamentally established to avoid environmental prosecutions and their associated bad press. Whilst this is undoubtedly important, the key point of this paper is that such an approach is not in itself adequate to improve the long term environmental performance of an organization, taking it towards sustainable development.

Despite its growing adoption, there are a number of common concerns voiced about EMSs, particularly in relation to standards of environmental performance, the gap that often occurs between policy statements and on-the-ground implementation, and an over emphasis on the documented system (Benchmark Environmental Consulting, 1995).

No environmental performance standards are specified in AS/NZS ISO 14001 beyond a “commitment to legislative compliance” and a commitment to “continual improvement”. Thus, two organizations with very different environmental performance may both have a certified EMS (Standards Australia, 1996). A frequent concern raised by environmental groups is that AS/NZS ISO 14001 has no absolute performance levels and hence organizations with poor, perceived performance may be able to achieve certification and gain environmental credentials (WWF, 1995).

Legislative compliance is often the adopted “performance level” for many organizations. A European study found that 81% of companies said the key motivator for seeking certification to an environmental standard was compliance with legislative requirements (ISCID, 1996).

However, there are some very important drawbacks to this approach to environmental management. A compliance approach is a reactive one - it responds to requirements and controls placed upon the organization typically by environmental agencies. It treats the environment as a burden to business. The growth in environmental legislation around the world since the 1970s has been enormous and it seems clear that there will continue to be additional regulation. An approach which allows others to set the agenda, means the organization will always be lagging behind in its sector - not a situation that most businesses want to be in.

Legislation lags behind the recognition of environmental issues and concerns by scientific research or from pressure groups. So adopting an approach which is focused on today’s legislative compliance is not assessing potential future changes or directions in environmental issues. Looking to the future can open up opportunities and efficiencies for business or at the least prevents today’s investments turning into tomorrow’s obsolescence.

For many organizations a large proportion of their activities are not regulated by environmental legislation although some of their outputs can be. This is particularly true for government agencies, such as Transport SA. For example, there is no environmental legislation governing transport policy or transport investment decision-making processes - yet it is at this level that key decisions are taken which can have a profound effect on the environment. Once those decisions are realised into, say, a road construction or maintenance programme, then environmental regulation relating to environmental assessment and pollution control come into play. There is no environmental legislation governing energy consumption or fuel efficiency - yet the transport sector consumes about 25% of Australia’s total energy consumption (ABARE, 1993).

Roome, 1992 describes five options available to business to manage environmental impacts: non-compliance, compliance, compliance plus, commercial and environmental excellence, and leading edge. Generally speaking, the compliance options focus on technological fixes, particularly pollution control, to meet operational licenses, permits or standards. There is typically some “add-on” of organizational functions, such as an audit or compliance team to ensure that the relevant controls are in place. To achieve excellence, Roome argues, requires not only the technological control mechanisms and changes to the organizational structure and system, but also changes to organizational and individual values and ethics.

The steps taken at Transport SA strive for this level of environmental excellence.

**A STRATEGIC APPROACH TO EMS IN TRANSPORT SA**

Criticism of ISO 14000 series argues that there is an enormous difference between running an environmental management system and sustainable development. “One is short term, tactical and problem solving, the other long term, strategic and holistic. Seen in its proper perspective, the ISO 14000 series is not a
destination but the first step on the thousand mile journey towards sustainable development” (Sheldon, 1997).

Much of the environmental management at Transport SA in the past has been reactive to environmental problems or incidents and has been focused at the detailed project (technical) level. Since 1996, however, work has concentrated at the “top level” of environmental policy, commitment and organizational change. The approach is strategic - rather than one focused only on compliance or due diligence.

There are four critical attributes of this strategic approach: a focus on people, communications, future driven and business integration.

**Focus on people**

The approach has a strong focus on people - both within Transport SA and externally. Around 1000 people have contributed directly to the development of Transport SA’s Environment Strategy. Importantly, the range of people involved is very broad.

The public were asked about existing and future transport related environmental issues and the views of stakeholders, including environmental groups, industry, environmental agencies, were sought (Manidis Roberts Consultants, 1997). This helped define community and stakeholder priorities and their concerns for the future. This knowledge is vital for Transport SA, as it allows questions to be asked such as:

- “do our current activities and investments align with the priorities of the public and stakeholders”; and
- “can we take actions now to either prevent those future issues arising or reduce their impact on the environment, for example by enhancing our approach to vehicle emissions or developing partnerships with catchment management bodies to contribute to improvement of water quality”. Both of these initiatives have been taken recently as a result of the strategic approach.

It is critical to the strategic approach that the performance standards established by the EMS address the community and stakeholder concerns as well as the business and policy arena within which Transport SA operates.

The views of staff from all parts and levels within Transport SA were elicited on present environmental performance and desired future levels. There is a noticeable “heritage” within Transport SA - employees are strongly committed and loyal to the organization. Also apparent from the many focus groups and interviews was that the staff were “hungry” for improved environmental performance.

Understanding employee attitudes and views on the environment plus a detailed knowledge of the behaviour of individuals and the organization is vital to create the cultural change necessary to achieve long term and lasting improved environmental performance. As Rucci points out in relation to new management strategies, it could just be seen as the latest management fad with some great sounding words, and unless the staff gain an understanding of their role in the strategy, then after a while behaviour will revert to former practices (Rucci et al, 1998).

**Communications**

Linked closely to the focus on people is a strong emphasis on communications internally. In general management theory, the most effective managers have been shown to have a much greater emphasis on communications and networking (Robbins et al, 1997) - so why should environmental management be different?

To make an EMS work requires a very considerable commitment to communications. This is not restricted to intranet bulletins, newsletters or other passive communication techniques but requires active communication to build the trust and environmental knowledge base within the organization so that all employees (whether executive, professional or support staff) grasp the purpose of the system and how their own work is relevant and contributes.

By involving staff in the development of the Environment Strategy, Transport SA has built upon the inherent enthusiasm in a majority of the staff for the environment and has permitted the identification of
environmental champions throughout an organization. The process has generated the ownership and trust necessary to ensure that the mechanics of the system work. Demonstrable commitment from senior management has assisted this process, for example the willingness to participate in a “hands-on” way in the strategy development through an Executive Steering Group.

External communications are also vital. Transport SA does not have responsibility for all aspects of the transport system in South Australia - to achieve some of its long term directions it will need to work with other levels of government, industry, transport users, stakeholders and the public. Strong communication, networking and partnering skills are all part of the tool kit for improved environmental performance. Public reporting of Transport SA’s performance will be an important part of the ongoing dialogue with the South Australian community in the future.

**Futures driven**

If the compliance approach is concentrated on meeting immediate requirements then the strategic approach is focused on the question of “where do we want to be?” Only by answering this question can we hope to put in place the investments and instigate the changes that will take us there. Such questions are of necessity broad in their scope - it is not about the value of the roadside management budget in 2010 but what quality of roadsides do we want then. For example, Transport SA’s budget for roadside management in 1996/97 had a large proportion spent on grass mowing and litter collection. By adopting a more natural resource management approach to roadside management (eg, the gradual replacement of the exotic grass species with a native flora, where appropriate) Transport SA expects to see environmental and financial benefits over the next 5 years or so.

**Business integration**

The environment has become an area of business management - in the same way as marketing and human resources - you just cannot run a business without them!

However, changing the logic and culture of an organization takes concerted effort over time. Moving from environment as an “add-on” function to something fully integrated into business management started at Transport SA with the completion of the Environment Strategy in 1997.

Frequently, EMSs are accused of changing little or being “greenwash” as Free term it (Free, 1997). The corporate environment policy may commit to much but in practice there is little change in the organization’s environmental performance or management. Commonly a weakness in organizational commitment, communication or lack of resources (e.g. staff and financial constraints to environmental “investments”) leads to a failure for deeds to match words.

An immediate top priority at Transport SA was to integrate the Strategy directions into the business decision making processes of the Agency, especially the investment planning process, business and sections plans and other corporate strategies which were being prepared or undergoing review. These are the processes where decisions of fundamental significance to Transport SA’s environmental performance are made. A review of the achievements of this integrated process is proposed for later in 1998 to allow the key implementation lessons to be learnt.

Separate business planning and investment processes have not been created for environmental considerations. These will be incorporated within the organisation’s normal business management systems. For example, the environmental training is to be incorporated within the systems currently run by the human resources section, not the subject of a new and different system managed separately by the environment section.

**Outcomes of the strategic approach**

An EMS can significantly enhance long term business - 83% of businesses sampled in a European study identified long term business security as a key benefit of EMS certification (ISCID, 1996).
In many organisations, much effort is often expended on developing a documented environmental management system – whether it be computer or paper based – without commensurate effort or consideration of practical implementation. To achieve certification to AS/NZS ISO 14001, the system must be effective in managing the environmental impacts of the organization – this means it must be implemented. Audits of EMS must cover not only the documented system but also its implementation and effectiveness. This represents a major challenge to organizations and their auditors to keep their focus on the broad picture rather than the “minutia” of the documentation (Seaman, 1997).

Quite simply the mechanics of a management system – whether it be for environmental, cost control or customer service ends – is not enough to make it work (Rucci, et al, 1998). The adoption of an “off-the-shelf” environmental management system will not work. It’s much like saying if you have an accounting package for your business your financial performance will improve.

It is too early to measure the business effects of the strategic approach at Transport SA but the initial outcomes and responses are encouraging. The Environment Strategic Plan was produced in late 1997 and endorsed at Executive level. Tideman and Thornton, 1998, provides details of methodology and an overview of the plan’s content.

The approach adopted provides a very clear expression of the environmental policy direction and objectives for Transport SA which has a high degree of ownership, understanding and support by individuals in their various roles in the organization. The strategic approach to EMS makes it possible to avoid the “petty bureaucratising” and “layers of checking” of environmental management where broader issues often get lost in irrelevant and detailed minutia (Seaman, 1997). How - because trust and ownership has been established, the direction is understood and the organisation moves to the future in a proactive way. The approach does not ignore legislative compliance but achieves compliance as an “outcome not as the driving strategy” for corporate environmental management (Bates, 1998).

By taking a strategic approach to environmental considerations, direction and guidance flows through the organization to the specific project level encouraging innovative “solutions” which result in better environmental, and other outcomes.

Action areas for Transport SA

Of course there are still areas for improvement at Transport SA - if there is one thing that is certain in adopting a continuous improvement philosophy, there always will be areas for improvement! Many of these are already being addressed, for example through this year’s business planning cycle and through current proposals to restructure the delivery of environmental services within the organization. Areas for further strengthening are at the strategic level of audit and review and environmental reporting mechanisms, particularly public reporting and continuing the development of performance indicators. The importance of the need for ongoing communications and a programme of targeted training and awareness raising has also been recognised as critical to maintaining the momentum and achieving the ongoing improvements in environmental performance. Some areas of Transport SA’s activities such as transport policy, property management and environmental performance of suppliers require additional work to ensure that environment is fully integrated into the management processes.

CONCLUSION

“On the one hand developing an integrated environmental policy had strategic significance for the business’ organizational development. On the other, a successful environmental policy demands the type of forward thinking which is characteristic of strategic management.” (Roome, 1992.)

The key message from the experiences at Transport SA to date is that EMS cannot be bolted on to an organization. It must be strategically focused on future environmental performance and the people that will make this happen. EMS is not about thick manuals nor about computer systems. There are many cases where an EMS just sits on the shelf and there is marginal improvement in an organisations environmental performance as a result of their investment of very considerable time and resources. The focus of an EMS must be on people - their attitudes, behaviour and responsibility.
At a basic level, the scope of an EMS is a “compliance tool”. At the other end of the spectrum, an EMS can be a driver of change and a tool in achieving sustainable development (Sutton, 1996). At Transport SA the efforts since 1996 in developing this strategic approach is a major strength providing a solid basis from which environmental performance can be enhanced in the future - on the route to sustainable development.

REFERENCES


Institut Superieur de Commerce International a Dunkerque. 1996. Environmental Management Standards - accelerator or Brake for business. ISCID/SGS.


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