EMAS AND REGULATORY RELIEF IN EUROPE: LESSONS FROM NATIONAL EXPERIENCE

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Apart from in Germany and Austria, corporate participation in the European Eco-Management and Audit Scheme (EMAS) has remained sluggish and far behind involvement in ISO14001. Given the lack of response in most EU member states, the key issue for the current EMAS revision is to increase incentives for companies to join the scheme. One of the proposals in this respect is to encourage member states to consider a lighter regulatory touch for EMAS participants. The aim of this article is to assess the extent to which encouraging regulatory relief may contribute to an increase in the number of EMAS registered companies. For this purpose the regulatory relief already offered to EMAS registered (and ISO14001 certified) companies in France, Germany, The Netherlands and the United Kingdom is described and analysed. Based on this experience, the central conclusion of the article is that regulatory relief can increase participation in EMAS, but that to do so it must be granted exclusively to EMAS registered companies, and that ideally such relief should be substantial and integrated into a comprehensive voluntary policy approach aimed at altering the traditional relationship between government and industry. However, given that some countries treat EMAS registration and ISO14001 certification as equivalent, with respect to regulatory relief, even those deregulation measures that fulfil the above conditions may lead to an increase in ISO14001 certifications rather than EMAS registrations. Copyright © 2001 John Wiley & Sons, Ltd and ERP Environment.

INTRODUCTION

Article 20 of the European Union’s Eco-Management and Audit Scheme (Council Regulation 1836/93 of 29 June 1993, EMAS for short) states that the scheme must be reviewed five years after coming into force, and, if necessary, appropriately amended. The EU Commission published an initial draft proposal for a revised scheme (EMAS II) on 30 October 1998, which has

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since been revised several times. The most recent proposal, the Council Common Position (August 2000), was given a second reading by the European Parliament in July 2000 and has now been submitted to the Council for further discussion. Apart from in Germany and Austria, corporate participation in EMAS has remained low throughout the EU, lagging well behind participation in the international environmental management systems standard DIN ISO14001. Given the poor response in most EU member states, the key issue for the EMAS revision is to raise the incentives for companies to join the Scheme (Hillary, 1998).

While EMAS II attempts to address this challenge in several ways this article focuses on one particular measure: the encouragement of member states to consider a lighter regulatory touch for EMAS participants.1 'Member States should consider how registration under EMAS in accordance with this Regulation may be taken into account in the implementation and enforcement of environmental legislation in order to avoid unnecessary duplication of effort by both organizations and competent enforcement authorities' (Article 10 (2) of the current draft proposal). If one focuses on the aim of increasing participation in EMAS this proposal begs several questions. Does national experience already exist concerning the introduction of regulatory relief for EMAS registered companies? If so, what policies have been adopted? Is it possible to derive conditions under which deregulatory measures are successful in increasing EMAS participation? To what extent may the encouragement of regulatory relief under EMAS II contribute to an increase in the number of EMAS registered companies? The aim of this article is to help answer these questions by analysing national experience with a lighter regulatory touch for EMAS registered companies in France, Germany, The Netherlands (NL) and the United Kingdom (UK).

The structure of the article is as follows. The following two sections provide some background information. The first includes a short description of EMAS, and those differences between EMAS and ISO14001 that are relevant with respect to regulatory relief. The issue of whether participation in EMAS or ISO14001 justifies regulatory relief is also briefly touched upon. The next provides information on the number of EMAS verified and ISO14001 certified companies in the four countries under review and briefly explains the varying participation rates. ISO14001 is given attention in these sections because some member state governments treat EMAS and ISO14001 equally with respect to regulatory relief. The next four sections give an overview of the different national discussions about deregulation for EMAS participants, the various policies adopted and an assessment of whether regulatory relief was an important factor in influencing companies’ decisions to become registered with EMAS in the four countries under review.2 This provides the basis for assessing whether the lighter regulatory touch proposed in EMAS II will increase the number of EMAS registered companies in the last section.

ENVIRONMENTAL MANAGEMENT SYSTEMS AND REGULATORY RELIEF

EMAS and ISO14001

In simple terms, the EMAS regulation is an environmental management system standard for industrial sites.3 Participation in EMAS is voluntary, but once a company has decided to become registered with EMAS it must meet the following provisions. The company must

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1 Other measures are discussed in detail by, e.g., Lütkes and Ewer (1999).

2 These sections are based on case studies on the implementation of EMAS in the four countries (Bültmann and Wätzold, 2000; Eames, 2000; Lulofs, 2000; Schucht, 2000). The results of the case studies were obtained by a literature review, expert interviews and a survey on companies’ motives to take part in EMAS. The survey is based on questionnaires sent to all EMAS participants in the four countries. For more information on the survey, please see the individual case study reports.

3 The current draft proposal for EMAS II suggests opening up EMAS to non-industrial sectors. Furthermore, all kinds of organization that have their own functions and administration will be allowed to participate in EMAS. This means that not only sites, but also entire companies as well as parts or combinations thereof, can be registered. In anticipation of this development in the following we often speak of companies instead of sites.
first adopt an environmental policy in which its overall environmental aims and principles of action are specified. In the policy, the company commits itself to comply with all relevant environmental regulations and to continuously improve its environmental performance. An environmental review is then conducted. This is an initial comprehensive analysis of the environmental issues, impacts and performance related to the activities of the company to be registered.

On the basis of the general goals of the environmental policy and the results of the environmental review, an environmental programme is introduced, which contains concrete goals and measures to attain them. Furthermore, an environmental management system (EMS) has to be established. Once the EMS is implemented, an environmental audit is performed, which evaluates whether the system is suited to securing compliance with all relevant regulations and the company’s own environmental goals. In order to inform the public about the company’s environmental activities, an environmental statement is prepared. The statement has to include, among others, an assessment of all significant environmental issues related to the activities of the site. If appropriate, the environmental issues have to be presented in the form of quantitative figures on pollutant emissions, waste generation, energy consumption etc.

To examine its environmental policy, programme, management system and review and audit procedure, and to validate the environmental statement, the company has to commission an independent environmental verifier. The EMAS regulation requires member states to establish a system to ensure the verifiers’ independence and high level of qualification. Finally, the company can apply for EMAS registration. The registration body has to notify the relevant enforcement authorities of the company’s application. If the authorities are aware that the company violates any relevant law, they can object to its registration.

In common with the EMAS regulation, the ISO standard requires commitments to comply with relevant environmental regulations and to continually improve environmental performance.\(^5\) However, in contrast to registration under EMAS, legal compliance is not a necessary condition for ISO14001 certification. With respect to regulatory relief there are two other major differences between EMAS and ISO14001. Firstly, the ISO standard only requires companies consider processes for external communication of their significant environmental aspects and does not include any publication requirements. Secondly, there is no involvement of public authorities in the ISO certification process. Hence, enforcement authorities have no veto over the certification of firms.

**Regulatory relief**

It seems likely that companies which have implemented a standardized EMS are better informed about environmental legislation, better organized to appropriately deal with it and better motivated to do so than other companies (Gabel and Sinclair-Desgagné, 1998; Dasgupta et al., 2000). Moreover, these companies are subject to controls of external verifiers or certifiers. Given the fact that monitoring resources are scarce, enforcement authorities increase the overall level of compliance when they concentrate their limited resources on those companies that are more likely to breach the law (Hentschel and Randall, 2000). This is the general line of reasoning as to why companies with a standardized EMS should be granted regulatory relief, i.e. less frequent inspections. It is further argued that EMAS participation justifies a reduction of documentation and reporting duties. The reason being that the environmental data given in the validated environmental statement is partially or completely identical to the data demanded by the regulator. However, those that are critical of granting regulatory relief to companies with a standardized EMS point out that being ISO14001 certified or EMAS registered does not in practice guarantee that a company complies with all

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\(^4\) A detailed comparison of EMAS and ISO14001 is given by e.g. Starkey (1999) and Sheldon and Yoxson (1999).

\(^5\) The current draft proposal for EMAS II aims to improve the complementarity of EMAS and ISO14001, by using the ISO definition of an EMS.

relevant legislation, and fear that (substantial) regulatory relief may reduce the overall level of compliance (ENDS, 1998; Lübbecke-Wolff, 1998).

Opinions are divided on whether ISO14001 and EMAS are equally able to increase companies’ ability and willingness to comply with environmental legislation. Some consider both standards as equally effective and argue that, in practice, the essential step to improve a company’s legal compliance is the implementation of an EMS, which is provided by both standards. Others believe that EMAS is much better suited than ISO14001. They reason that only EMAS makes legal compliance a necessary condition for being registered, and that the involvement of public authorities in the accreditation and supervision of environmental verifiers and registration of companies gives the scheme credibility (Böhm-Amtmann, 1997; Schottelius, 1998).

Empirical research by Dasgupta et al. (2000) suggests that having a standardized EMS is indeed a factor that positively influences compliance with environmental legislation, in the case of Mexican industry at least. Unfortunately, there is no empirical research comparing the degree of compliance of EMAS verified with ISO14001 certified companies. However, one study of environmental improvements by companies that have implemented EMAS and/or ISO14001 concluded that both standards are equally effective in improving companies’ environmental performance (FEU, 1998). If one is willing to accept the assumption that the general environmental improvement by a standardized EMS is a suitable indicator for improved compliance, the results of the study can be taken to suggest that the two standards are equally effective in increasing companies’ level of legal compliance.

PARTICIPATION IN EMAS AND ISO14001

Participation rates
Participation in EMAS varies significantly among European countries. The figures for EMAS registration and ISO14001 certification are given in Table 1. In order to be able to compare the number of EMAS verified and ISO14001 certified companies in the four countries under review, the figures have to be normalized as the countries vary in size, industrial structure and number of companies, i.e. the number of potential participants differs. As an indicator for the number of potential participants, we use the number of companies from the manufacturing sector with more than 20 employees, as there is no comparable data available that includes smaller companies and service sectors. In addition, participation has been largely restricted to manufacturing companies with more than 20 employees.

Table 1 shows that of the four case study countries Germany has by far the most EMAS registrations, in both absolute and relative terms. In the other three countries participa-

<table>
<thead>
<tr>
<th></th>
<th>No. of potential participants</th>
<th>EMAS</th>
<th>ISO14001</th>
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<tbody>
<tr>
<td></td>
<td>No. of registered companies</td>
<td>% of potential participants</td>
<td>No. of certified organizations</td>
</tr>
<tr>
<td>France</td>
<td>24,671</td>
<td>36</td>
<td>0.15</td>
</tr>
<tr>
<td>Germany</td>
<td>37,413</td>
<td>2432</td>
<td>6.50</td>
</tr>
<tr>
<td>NL</td>
<td>6404</td>
<td>26</td>
<td>0.41</td>
</tr>
<tr>
<td>UK</td>
<td>29,608</td>
<td>73</td>
<td>0.25</td>
</tr>
<tr>
<td>All member states</td>
<td>–</td>
<td>3325</td>
<td>–</td>
</tr>
</tbody>
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tion in EMAS is insignificant. The ISO14001 figures reveal that companies in France, The Netherlands and the UK do not generally reject standardized environmental management systems, but prefer the ISO standard to the EMAS regulation. When participation in ISO14001 is considered in relation to the number of companies, it is highest in The Netherlands followed by Germany, the UK and France.

Explaining participation rates

Companies’ decision whether to join EMAS depend on the net benefits they expect from EMAS participation and the net benefits they expect from joining the alternative EMS standard ISO14001. Companies will ultimately choose the standard with the highest net benefits, provided they are positive. This suggests that an explanation of the varying national participation rates should focus on the factors that influence companies’ choice between EMAS and ISO14001.

ISO14001 has two invariable advantages over EMAS. These are its worldwide recognition and lower participation costs. Taking part in ISO14001 is less costly than participating in EMAS, because the ISO standard requires neither publication of an environmental statement nor registration. Moreover, companies appreciate that the description of the management system is clearer in ISO14001 and follows the same structure as in ISO9000, a standard they are familiar with. Many firms regard the absence of government involvement in ISO14001 as a further advantage. Apart from in Germany, EMAS has only one (weak) advantage over ISO14001, namely that it can help companies to improve their external communication. In Germany, EMAS provides additional advantages, because public bodies provide more information and subsidies to EMAS participants and only grant regulatory relief to EMAS registered companies. In the other three countries EMAS and ISO14001 are equivalent with respect to these factors. This explains why the number of EMAS registrations is highest in Germany. In the following we focus our analysis on one particular factor that influenced companies’ decision to take part in EMAS: regulatory relief.

FRANCE

Ever since the start of EMAS French industry has made it clear that it would only become involved in EMAS on a large scale if its efforts were taken into consideration by the enforcement authorities. In 1996 ‘Entreprises Pour l’Environnement’ (EPE), the French lobby of large firms with a pro-environmental approach, initiated debate about regulatory relief for EMAS registered sites. EPE argued that industry would be willing to take voluntary action (i.e. EMAS) if the regulatory burden were lightened in return. However, EPE did not make any specific suggestions concerning how this should be done.

In France, the Ministry of the Environment (MATE) heads the environmental enforcement authorities, and is thus the organization empowered to officially decide whether to grant regulatory relief. The MATE did not intend to establish formal deregulation opportunities for EMAS registered sites. It argued that it would be potentially unfair to set up a formal framework for regulatory relief, as all firms should be treated equally before the law. Furthermore, the MATE pointed out that not all registered sites achieved a comparable level of environmental protection and that regulatory controls covered not only the environmental performance of a plant but also other aspects such as risk prevention measures. In addition, the MATE has always regarded EMAS as an instrument allowing firms to advertise their environmental performance (i.e. a promotional instrument) and not...
as a regulatory instrument, and has avoided mixing these two approaches.

However, discussions on this topic within government led to a circular, the ‘circulaire Lepage’, in 1997 (28 February 1997). Some of the suggestions made by Corinne Lepage, the Environmental Minister at that time, initially seemed quite far reaching although rather vague. Firstly, she hinted at the possibility of an evolution of the nomenclature of classified installations with respect to plants subject to declaration9 (i.e. abolishing the declaration requirement for firms where the risks would be controlled by their EMS) if companies adopted environmental management systems in accordance with EMAS or ISO14001 on a large scale. However, this suggestion was not eventually pursued.

Secondly, she suggested that EMAS or ISO14001 registration could be taken into account with respect to control requirements. However, the circular failed to define rules for the local licensing and enforcement authorities: the DRIRE (Direction Régionale de l’Industrie, de la Recherche et de l’Environnement), and the inspectors of the ‘installations classées’ (plants subject to either authorization or declaration). Therefore, the actual effect of the circular was simply to signal to the local regulatory authorities the possibility of using their discretionary powers to take EMAS registration (or ISO14001 certification) into account when deciding the frequency of controls and reporting requirements to be imposed on a site.

Current policy is that, in a few regions, the DRIRE does take account EMAS registration or ISO14001 certification by reducing the frequency of reporting requirements for those sites. As the inspectors of the ‘Installations Classées’ have insufficient personnel and have to set priorities concerning controls, they partly take EMAS registrations or ISO14001 certification into account as well, and inspect EMAS registered and ISO14001 certified companies less often. It should be added that firms with a standardized EMS have frequently been firms with low inspection requirements. Consideration of a standardized EMS for these firms is thus reflected in a general improvement in the relationship between the company and the regulatory authority that can influence various decisions and procedures (such as licensing, settlement of conflicts with neighbours etc).

For a short time, the ‘circulaire Lepage’ raised hopes among industry that EMAS registrations would be taken into careful consideration with respect to control requirements. Schucht (2000) points out that the firms’ disappointment concerning the final decision not to officially formalize measures for regulatory relief was one of the factors contributing to the low number of EMAS registrations in France. However, as the MATE has treated EMAS and ISO14001 equally with respect to deregulation, any move towards more regulatory relief would probably have included both standards. Given the fact that French firms have demonstrated a preference for ISO14001 over EMAS, ISO14001 certification is more likely to have risen than registration with EMAS.

GERMANY

Business organizations quickly called for deregulation in return for companies’ participation in EMAS. As the federal German states are responsible for licensing, monitoring and enforcement, they were the ones who primarily responded to this call. Today, all German states have introduced options for regulatory relief. Bavaria has been the pioneer with the ‘Umweltpakt Bayern’ (Environmental Pact Bavaria), which was adopted on 23 October 1995. This article concentrates on the ‘Umweltpakt Bayern’ as it is the first and most comprehensive attempt to include EMAS in the implementation of environmental policy. In order to illustrate the diversity of the approaches adopted by the German States, we also briefly describe the situation in North Rhine-Westphalia (NRW). In NRW, EMAS participants were granted much lesser

9 According to their potential harmfulness, various plants have to either officially receive an operation license (plants subject to authorization) or declare their production (plants subject to declaration). Plants subject to declaration have little environmental impact.
regulatory relief than in Bavaria. Furthermore, the measures were not integrated into a comprehensive voluntary agreement.

The ‘Umweltpakt Bayern’ is a comprehensive voluntary agreement between the state government and Bavarian industry. The covenant establishes obligations on both parties. The companies involved guarantee, for example, to reduce emissions, to increase the share of products they transport by rail, and to intensify participation in EMAS. The agreement states that 500 sites must be EMAS validated in Bavaria by October 2000. In return, the state authorities promised, among other things, financial support for the application of environment-friendly technologies, and to provide a lighter regulatory touch for EMAS registered sites.

The principal motivation of the Bavarian government in granting regulatory relief was to reduce costs for EMAS participants. Another, albeit less important, aspect was to reduce the existing implementation gap. By relying on the control activities of the verifiers, enforcement authorities can concentrate their thinly spread monitoring resources on companies that are problematic with respect to compliance. The deregulation measures are based on the principle of ‘funktionale Äquivalenz’ (functional equivalence), i.e. the measures to substitute traditional reporting and monitoring measures need not be exactly identical to the traditional ones, but must be comparable with respect to scope and quality.

The basis for regulatory relief is the ‘Substitutionskatalog’ (substitution catalogue) that has been developed in close co-operation between the ‘Verband der Chemischen Industrie Bayern’ (Association of the Bavarian Chemical Industry) and the Bavarian government. The substitution catalogue provides detailed proposals for deregulatory measures, most of which have been integrated into the existing administrative guidelines (Verwaltungsvorschriften), which are binding on authorities. Regulatory relief for EMAS registered companies currently applies to reporting, documentation and control duties, and covers the fields of waste, water and pollution control law. For example, companies are exempted from the requirement to supply the supervisory authority with a yearly emission report if they collect and provide comparable data in the context of their EMAS participation. With respect to the control duties, it should be explained that monitoring is partly privatized in Germany, i.e. companies are obliged to commission and pay independent institutions to measure emission values, inspect measuring equipment etc. Therefore lightening the regulatory burden also means that the controls by these independent institutions are partly replaced by the companies’ internal monitoring and the environmental verifiers’ inspections for the EMAS scheme.

Government as well as industry consider the ‘Umweltpakt Bayern’ a success, not least because the threshold of 500 registered companies, which was supposed to be reached by October 2000, was achieved one year ahead of schedule. Currently, the terms of an ‘Umweltpakt Bayern II’ are being negotiated.

NRW did not grant regulatory relief to the same extent as in Bavaria; nor did it integrate it into a comprehensive voluntary agreement. The so-called ‘Substitutionserlaß’ (substitution directive), which NRW enacted in May 1998, deals exclusively with pollution control law. It instructs the competent authorities to use their discretionary power to substitute companies’ internal control mechanisms for control duties and to substitute documentation and information provided for in the EMAS regulation for those required by the pollution control law.

Both states offer regulatory relief solely to companies registered with EMAS, and not those certified to ISO14001. The reasons are that, unlike EMAS, ISO14001 does not make compliance with all relevant environmental legislation a necessary condition for certification, nor does it provide for government involvement in the certification system. Both aspects were regarded as prerequisites for regulatory relief in all German states for legal reasons. In recent months, a few German

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10 Please refer to Bültmann and Wätzold (2000) for a detailed description and analysis of the accreditation, supervision and registration system Germany installed in the context of EMAS.
states have questioned this position and considered offering regulatory relief to ISO14001 certified companies as well.

Comparison of the number of EMAS registered companies in Bavaria and NRW suggests that the Bavarian approach was more successful in terms of participation rates. Table 2 shows that, in relation to the number of potential participants, participation is much higher in Bavaria than in NRW.

Most of the factors that were presented above as influencing the decision to participate in EMAS (instead of ISO14001) do not vary within Germany. Only the supply of information and subsidies, and the provision of regulatory relief, can vary from one German state to another, because these measures are decentralized on the state level. As NRW and Bavaria both actively promoted participation in EMAS, by supplying information and financial resources, it is mainly their deregulatory policies that differ between the two states. Therefore, it can be assumed that the Bavarian approach of taking relatively extensive deregulation measures and integrating them into a comprehensive voluntary agreement did indeed positively influence participation rates. The integration of deregulation measures into the ‘Umweltpakt Bayern’ was important because the agreement included a commitment by industry to achieve a certain number of EMAS participants, and because it brought EMAS and the Bavarian deregulation activities enormous publicity.

**THE NETHERLANDS**

Environmental management systems standards became popular in The Netherlands in the early 1990s. The quick adoption of EMSs in The Netherlands can be attributed to two trends in Dutch (environmental) policy.

The first was the quest for deregulation in the early 1980s, which also included environmental regulation. Industry perceived environmental regulation as fast changing and too detailed, and argued for stability to facilitate investment without large risks stemming from ever-changing government regulations. Industry considered self-regulation and EMSs to be suitable strategies for deregulation. Although the Government was interested in EMSs, it considered it inadequate for deregulation as such. It demanded uniformly dependable EMSs. One way of judging the quality of EMS was believed to be standardization and certification. Industry accepted that a trustworthy system required EMSs of high quality and some governmental involvement in standardization and certification.

The second trend was the rising level of political and public environmental awareness in the late 1980s. The first Dutch National Environmental Policy Plan (NEPP) published in 1989 called for radical changes in order to respond to these concerns. Environmental objectives, in terms of emission reductions, were set for the next 25 years and relevant ‘target groups’ were identified that were supposed to contribute to the planned emissions reductions. Two specific new strategies within the NEPP need to be highlighted in order to understand the characteristics of regulatory relief in The Netherlands.

The first was a policy to raise the ability of industry to internalize environmental values and to introduce EMSs within the industry target groups. In this context, the Government issued a memorandum on environmental management, which was written in close cooperation with industry. A ‘learning’ programme of about 60 million Dutch guilders

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**Table 2. EMAS registered sites in March 2000.**

<table>
<thead>
<tr>
<th></th>
<th>No. of potential participants (companies from the manufacturing sector with more than 20 employees in 1999)</th>
<th>No. of registered sites</th>
<th>% of potential participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bavaria</td>
<td>6710</td>
<td>548</td>
<td>8.17</td>
</tr>
<tr>
<td>NRW</td>
<td>9336</td>
<td>467</td>
<td>5.00</td>
</tr>
</tbody>
</table>

financed by the Government accompanied this memorandum. It aimed to stimulate the uptake of environmental management in organizations, and included the development of checklists, handbooks and courses on how to implement EMSs in companies. There were also some projects concerned with the standardization and certification of EMSs and the changing relationship between public authorities and pro-active companies. These projects focused on the Dutch models of the EMSs, BS7750 and, when drafted, ISO14001. This explains why Dutch discussions about regulatory relief are primarily related to ISO14001, and EMAS is only implicitly included.

The second strategy was the negotiation of agreements with the target groups, in which the target groups’ contribution to the achievement of environmental policy goals was specified. The adoption of EMSs was, where possible, integrated into such comprehensive sectoral negotiated agreements between industry and Government. In this context, EMSs were considered as both a tool for change and a tool for monitoring change.

These developments formed the basis for a regulatory approach that distinguishes between ‘pro-active’ companies and ‘laggards’. The negotiated agreements set the agenda with respect to the minimum requirements for self-regulation by pro-active companies. The general idea is that pro-active companies that internalize environmental values into their organizations and perform well should be treated differently from laggards as far as monitoring, enforcement and licensing are concerned. Pro-active companies are trusted to properly perform measuring duties, self-reporting and self-control. With respect to authorization procedures, licensing and updating regulations in the licenses of pro-active companies, goals are used instead of detailed rules in order to decrease the level of detail in the permit. As a result the degree of flexibility afforded to the company is increased. If self-regulation fails in companies or sectors of industry, public authorities can switch to traditional regulation.

An EMS is considered to be the tool to implement self-regulation and to produce the documents and data needed to convince the authorities of one’s environmental credibility. Having its EMS certified or verified helps a company become a trustworthy partner. However, there is no regulatory relief for a company with a standardized EMS per se. If the company cannot convince the authorities that it performs better than demanded by the minimum regulatory requirements as well as the requirements of the negotiated agreements, the firm will be treated as a laggard. Hence for regulatory relief the firm must not only be certified and/or verified, but has also be pro-active. This means that, in The Netherlands, standardized EMSs are just one element of a wider policy framework to build a different relationship between the authorities and pro-active companies.

While standardized EMSs are popular in The Netherlands, companies overwhelmingly prefer ISO14001 (see Table 1). The fact that ISO14001 and EMAS are treated equally with respect to regulatory relief is one important reason why companies see little advantage in EMAS over ISO14001.

UNITED KINGDOM

The possibility of linking EMAS registration (or BS7750/ISO14001 certification) to some form of deregulation has generated considerable debate within policy circles in the UK, but almost no concrete action. Instead, EMAS (and ISO14001) is just one of many factors taken into consideration when establishing inspection frequencies for large industrial processes. In common with The Netherlands and France, public discussion in the UK has largely regarded EMAS and ISO14001 as equivalent. Furthermore, the ongoing UK debate over the possibility of providing some form of lighter regulatory touch for companies with an externally verified EMS has focused almost entirely on large industrial processes, i.e. those regulated by the Environment Agency under the UK system of Integrated Pollution Control (IPC) introduced by Part A of the Environmental Protection Act 1990. There has been little or no discussion of how regulatory relief might be applied to
small and medium-sized companies with an externally verified EMS, many of which do not fall within the remit of the IPC regime, but are instead regulated by local authorities under Part B of the 1990 Act.

As early as 1992, British industry was expressing mixed views over the possibility of linking EMAS registration to regulatory relief. For example, National Power, an early proponent of EMSs, argued that EMAS provided an opportunity for a site to publicly demonstrate its ability to manage its environmental impact, and that such self-regulation should be reflected in a corresponding reduction in on-site inspection by the regulators. By contrast, the United Kingdom Petroleum Association (UKPIA) at the time took the view that EMAS should have no role in the implementation of UK legislation or regulations associated with the inspection activities of authorities. It argued that if some member states used EMAS to ease legitimate controls and inspections, and thereby subsidize certain industrial sectors, this would create market distortions. These differences reflected broader divisions within UK industry at that time with respect to the proposed EMAS regulation. These divisions may be attributed in part to competition with the emergent British national EMS standard BS7750, and to resistance within some sections of UK industry to the notion of public environmental reporting (which was implicit in the Commission’s proposals for EMAS but which did not form part of BS7750).

At the time EMAS was implemented, the principal environmental regulator, Her Majesty’s Inspectorate of Pollution (HMIP), with the agreement of the Department of the Environment, sought to portray voluntary EMSs (including EMAS) as complementary to formal regulation under IPC. However, HMIP recognized that there might also be some benefit for firms operating EMSs in their interaction with the regulator. Senior HMIP staff explicitly accepted that it has always been the case that its inspectors had focused scarce resources where they would have maximum effect: the corollary being a lightening of the regulatory burden on companies with a sound record of environmental performance. HMIP therefore sought to formalize such judgements in a system for rating the risks posed by processes under IPC.

The proposed scheme, the Operator and Pollution Risk Appraisal (OPRA) system, was brought into operational use in 1997 by HMIP’s successor, the Environment Agency (EA). The OPRA system is intended to provide an assessment of the operators’ performance and the intrinsic risk of processes regulated under the UK’s IPC regime, in order to guide the frequency of inspection and monitoring visits. A recognized EMS is just one of 14 factors considered under the OPRA system.

In February 1997, in the closing days of the last Conservative administration, following lobbying from the Chemical Industries Association (CIA), the UK Department of Trade and Industry and Department of the Environment were reported to have instructed the EA to prepare guidelines for the ‘lighter’ regulation of IPC registered sites to ISO14001 or EMAS, thereby allowing certified firms to provide data less frequently and receive fewer visits. At the time, the agency was reported to be resisting what it considered to be ‘simplistic’ moves to reduce regulation of certified sites. However, the agency’s senior management and at least some of its field inspectors were divided over this issue. Although the senior management was fairly receptive, some inspectors were said to fear that such an initiative might lead to firms becoming less concerned with their environmental performance.

Since the current Labour government took power in May 1997, policy-makers in both central government and the EA have continued to discuss means of rewarding participation in EMAS/ISO14001. In October 1999 the board of the EA began discussing a major shift in the agency’s regulatory approach towards self-monitoring by industry and agency audits of companies’ EMSs, together with a reduced emphasis on technology-based regulation. At the time of writing, the implications of these discussions remain unclear.

More recently, in December 1999, the Department of Trade and Industry’s Oil and Gas Directorate, which is responsible for the regulation of off-shore oil and gas facilities,
published draft regulations and guidance on applying the Integrated Pollution Prevention and Control (IPPC) Directive to offshore installations. This provided for annual reporting requirements under IPPC to be integrated within the overall reporting from an environmental management system.

The fact that to date there has been relatively little regulatory relief for EMAS certified companies appears to be one of the reasons for the comparatively low number of EMAS participants in the UK. However, given the central government and regulatory agency’s policy of treating certification to EMAS and ISO14001 as equivalent and the preference of most UK companies for ISO14001, additional regulatory relief may serve to stimulate certification to ISO14001 rather than registration with EMAS.

CONCLUSIONS FROM CASE STUDIES

This survey of regulatory relief for EMAS registered (and ISO14001 certified) companies in France, Germany, The Netherlands and the UK shows that the proposal in EMAS II to consider a lighter regulatory touch for EMAS participants does not suggest anything new for these countries, but something all of them have already discussed and at least partly implemented. Therefore, its effect will be restricted to giving an additional impetus to existing activities.

The experience of France, The Netherlands and the UK reveals that in counties where companies generally prefer ISO14001 regulatory relief has no influence on EMAS participation rates if it is granted to both EMAS and ISO14001 participants. Rather than helping EMAS to challenge the ISO standard’s pre-eminence, it stimulates participation in ISO14001. In Germany, where a lighter regulatory touch is exclusively provided to EMAS participants, the number of companies that take part in EMAS is relatively high. However, as in Germany EMAS registered companies are also supplied with more information and subsidies than ISO14001 certified firms, the higher participation rates could also be caused by these factors.

Only the comparison of the two German states Bavaria and NRW, which are comparable with respect to the supply of information and financial resources but follow different deregulatory approaches, allows conclusions concerning the influence of regulatory relief on the number of EMAS participants. In Bavaria, regulatory relief is more substantial than in NRW, and, unlike NRW, is integrated into a comprehensive voluntary agreement designed to support companies’ self-responsibility and to reduce the level of regulation and control. The fact that Bavaria has significantly higher participation rates than NRW shows that the Bavarian approach is more successful in attracting companies to join EMAS.

The case studies of the other countries support this result. In France and the UK, where overall participation rates in standardized EMS are lower than in The Netherlands, relatively little regulatory relief is provided, and it is not integrated into a comprehensive policy approach. In contrast, in The Netherlands these two conditions are met. However, it should be borne in mind that our analysis is restricted as we do not know to what extent regulatory relief and to what extent other factors have contributed to the varying participation rates in the three countries.

It should be noted that a precondition for regulatory relief to be considered substantial by companies is that control activities by enforcement authorities must have previously been relatively strict, or that there is a credible threat of tighter controls being imposed on non-EMAS-registered (or ISO14001 certified) companies in the future.

Summarizing our findings, we can say that regulatory relief is able to increase the number of EMAS participants, but that to do so it must be granted exclusively to EMAS participants, and that ideally such relief should be substantial and integrated into a policy approach based on voluntary agreements and self-control by industry. However, given the existing policies in France, The Netherlands and the UK of considering EMAS and ISO14001 as equivalent with respect to
regulatory relief and the very recent trend in Germany to follow this approach, it is doubtful whether the first condition will often be met in the future.

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