
CONTENTS

elni News	1
Articles	4
How to Avoid a Policy Mess? The Case of Carbon Emissions Trading and IPPC <i>Adrian Smith and Steve Sorrell</i>	4
The EU, Environmental Considerations, and Standardizing <i>Bent Ole Gram Mortensen</i>	9
The Environmental Management System <i>ecoBudget</i> - A Model of Environmental Budgeting <i>Andrea Burzacchini and Christoph Erdmenger</i>	17
Environmental Legislation in India: Some Developments in the Nineties <i>Rajkumar Deepak Singh</i>	23
Environmental Law Principles in the Jurisprudence of German Administrative Courts <i>Gerhard Roller</i>	29
Current Affairs	35
Investing in the Environment - A Green Agenda for the Millenium Round <i>Sven Deimann</i>	35
EU Enlargement: Screening Results in the Environmental Sector <i>Ingmar von Homeyer, Lena Kempmann, Anneke Klasing</i>	43
Recent Court Decisions	48
European Court Decides in Favor of Improved Access to Environmental Information	48
Imprint	49
Tasks and Activities	50
elni Publications	51

*elni*NEWS**Concerted Action of Voluntary Approaches (CAVA) - Workshop on 24/25
February 2000 in Brussels**

In the framework of the EU-funded CAVA project the Öko-Institut and elni organise a workshop on „The Integration of Voluntary Approaches into Existing Legal Systems“ on 24th and 25th February 2000 at the EU Representation of Hesse in Brussels. The aim of this workshop is to discuss the available experience on the legal implications of VAs and to identify the remaining open questions for future research in this area, such as:

- their legal function (purpose, legal context, policy role etc.);
- their legal character (e.g. legal status, enforcement options, liability, monitoring, application of civil/public law provisions etc.);
- their combination with other instruments of environmental policy, integration and subsidiarity aspects;
- constitutional questions (e.g. legal legitimation, shift of power, participation rights, rights of third parties etc.).

The organisers are expecting international experts from science, politics and industry to be attending the workshop so that it will be a good forum for exchange of experience.

In September, a call for papers for the CAVA workshop was sent to all elni members. In the meantime, we have already received several papers. Nevertheless, we have extended the deadline by **31 January 2000** to give everybody the opportunity to prepare papers after the busy pre-Christmas period. You can find the Call for Papers on our elni webpage (www.oeko.de/elni) under the news section.

A detailed programme will be drafted in mid-January and sent to elni members by email. If you have not yet given us your email address or if you prefer to be informed by post, please send us a short note.

More information on CAVA's objectives, project partners, literature surveys, workshops etc. can be found at: <http://www.ensmp.fr/Fr/CERNA/CERNA/Progeuropeens/CAVA/index.html>

Young Environmental Law/Economics Pre- and Post-Doctoral Fellows Wanted

'Enforcing Environmental Policy' (EEP) is a project of a new European research training network on the instruments of environmental policy in the fields of climate protection and air pollution. It associates six European research teams in environmental law and economics established in France, Germany, Italy and UK, within both public and private non-profit-making organisations.

Subject to the positive outcome of the contract negotiation with the European Commission, the University of Paris I (F) and the University of Frankfurt (D) are searching **each one young researcher in environmental law**, the Öko-

Institut/elni in Darmstadt (D) **one young researcher in environmental law or environmental economics** and the Fondazione Eni Enrico Mattei (I) **one young researcher in environmental economics**, to conduct legal or economic policy research on the EEP common research project.

The young researchers will receive specific training in environmental law and economics. They will be appointed for three years from the beginning of April 2000 on a three-quarter part-time basis.

*For further information please visit:
<http://www.rz.uni-frankfurt.de/FB/fb01/steinberg/stein.htm>*

Practical Implications of Environmental Law Principles

On 1 October 1999, the *Center for Environmental Law and the for Environmental Law at the Facultés Universitaires Maritime Institute at the University of Ghent* and the *Center Saint-Louis Brussels* held an *elni* workshop on the practical implications of environmental law principles both at the international or supranational and the national as well as the regional level. Some fifty *elni* members, practising environmental lawyers, academics, and representatives from various NGOs from all over Europe and abroad attended this one-day conference, the first since the *elni* conference held in Milan in the fall of 1996.

The speakers explored the subject largely from four different angles. Following a general introduction by Nicolas de Sadeleer of C.E.D.R.E., Brussels, Prof. Piet Gilhuis of Tilburg University in the Netherlands and Prof. Frank Maes of the Maritime Institute at the University of Ghent dealt with some of the jurisprudential issues of environmental law principles and their evolution in international environmental law documents. A third group of papers provided some illuminating insights into how environmental (law) principles can guide the work of expert advisory bodies both in the Netherlands and in Belgium (and here in particular at the Flemish regional level). The final session revolved round environmental law principles in the case law of national and supra-national jurisdictions.

In his introduction, Nicolas de Sadeleer focused in particular on the precautionary principle. Given the potential boundlessness of precaution, Dr. Sadeleer sought to delimit its scope of application to uncertain - as opposed to certain or merely residual - risks. As such, he classified risks for which the empirical sciences have not (yet) been able to establish cause-effect-links but for which the occurrence of damage was nevertheless plausible. Prof. Gilhuis then elaborated on the jurisprudential distinction between principles on the one hand and rules on the other and pointed out some of the consequences that flow from this distinction for the binding force and effect of 'principles'. Similarly, Prof. Maes sought to trace the evolution of environmental principles from the United Nations Convention on the Law of the Seas (UNCLOS) to more recent multilateral, including regional, environmental agreements.

As speakers in the ensuing discussion pointed out, the picture that emerges from an analysis of recent international treaty practice is one of increasing recourse to principles, often worded in vague and cautious terms, rather than clear obligations for States parties to multilateral agreements. This softening in terms of the precise obligations accepted

by States was particularly evident if one compared the language of UNCLOS to some of the provisions in the Rio Conventions, as Prof. Marc Pallemarts remarked.

Indeed, the growing number of international environmental law documents that make use of principles imposing no rule-oriented and, in a sense, binding obligations on States raises the issue to what extent such documents are merely an invitation to indulge in acts of symbolic legislation - legislation that affirms commitment to an abstract principle without, however, creating binding rules with teeth capable of setting concrete and precise standards of environmental behaviour and conduct.

Comments from the floor also pointed out the possibility of principles entering into conflict with one another and, hence, requiring a hierarchy for their internal coherence and mutual compatibility. Establishing such a hierarchy, however, would be, in the words of Prof. Maes, a difficult task as it presupposed a common definition of 'principles'.

The potential for conflicting guidance to legislatures as a result of applying different environmental principles also became clear in the subsequent presentations on principles and the work of expert advisory bodies. As Ingrid Sievers from the Dutch VROM-Raad pointed out, applying the principle that preference should be given in environmental regulation to market-based instruments such as tradeable emission certificates could run counter to the requirements of the ALARA-principle. The former stressed the possibility of increasing emissions at particular installations as long as overall emission reduction targets are met, while the latter sought to impose an obligation on all installations - irrespective of global strategies and local cost considerations - to keep any emissions as low as is reasonably achievable.

Finally, and perhaps somewhat surprisingly in light of the above-noted propensity of international environmental law documents for cautiously-worded principles, environmental principles, and here again especially the precautionary principle, have proven very fertile ground jurisprudentially in the case-law of national as well as supra-national jurisdictions. For a start, as Nele Dhondt's paper on Environmental Law Principles and the Case of the Court of Justice made clear, environmental law principles are by no means devoid of legal force and effect. Contrary to much of doctrinal commentary which tends to stress the non-binding policy nature of principles, the Court of Justice has attributed considerable legal weight to them. The practical significance of the

precautionary principle in section 5 of the German *Federal Ambient Air Quality Control Act*, as interpreted and enforced by the German administrative courts, was also stressed by Gerhard Roller. His paper¹, however, also served to demonstrate the potential for environmental policy havoc that can attach to broadly-phrased principles which are artificially severed from the legislative context in which they were adopted and which can be construed so as to frustrate vigorous enforcement of environmental regulation. In this context, Gerhard Roller cited in particular two recent judgments of the German Federal Constitutional Court that relied on the cooperation principle in support of a line of reasoning that seriously curtailed the regulatory (and other) means that the authorities can put in place for purposes of enforcing waste and ambient air quality control legislation. On a brighter note, Isabelle Larmuseau reported on a series of recent court cases in Belgium (and here in particular in Flanders) where the precautionary principle, in combination with the Belgian constitution's express

¹ See Gerhard Roller's article on p. 29 in this issue.

guarantee of a right to a healthy environment, has been invoked - notably by the President of the Tribunal of Antwerp and the Belgian Council of State - to justify annulment rulings resulting in the revocation of licences for the operation of waste incinerators or racecourses.

The workshop concluded with a short communication from a representative of the Commission's Directorate-General for the Environment. Responding to leaks and rumours concerning an imminent Commission communication on the precautionary principle, Mr. Fanzone expressed his view that no decision could be expected in the near future. As for the substance of any communication, he stressed the need to explore precautionary measures other than regulatory bans. An appropriate measure to take in response to any political decision as to the precise level of risk that will be deemed acceptable could also be to issue recommendations or to initiate research campaigns.

The conference proceedings "Practical Implications of Environmental Law Principles", M. Sheridan & L. Lavrysen (eds.), will be published in spring 2000 by CameronMay, London.

Sven Deimann

ARTICLES

How to Avoid a Policy Mess? The Case of Carbon Emissions Trading and IPPC¹

Adrian Smith and Steve Sorrell²

1 Introduction

Environmental policy has grown enormously over the last 30 years. As environmental policy matures so the potential for interaction between different policy instruments grows. This interaction can be complementary and mutually reinforcing, but there is also the risk that different policy instruments might undermine the objectives of each. If we are to avoid a policy mess, then it is important that policy makers understand the features and dynamics of existing policy instruments and assess the likely interactions with any new measures they propose.

This paper illustrates policy interaction by examining two instruments whose objectives include the promotion of energy efficiency in European industry. The first policy instrument, the Integrated Pollution Prevention and Control (IPPC) Directive was introduced in all Member States in 1999. It requires industrial installations to use the Best Available Techniques (BAT) to releases to all three environmental media (air, land and water) and to promote energy efficiency. It is this last element of IPPC which is relevant here.

The second policy instrument is currently being debated in the wake of the 1997 Kyoto Protocol, namely tradable permits for greenhouse gas (GHG) emissions. Trading regimes are still being discussed and negotiated, nationally and internationally. Monitoring difficulties for GHGs are likely to confine trading schemes to carbon dioxide (CO₂) in the first instance. This paper focuses *solely* upon carbon emissions. The focus of any national carbon trading schemes will be large industrial energy users, such as those installations regulated under IPPC.

The paper demonstrates how implementation of IPPC energy efficiency requirements can constrain or facilitate participation in any trading scheme.

In sections 2 and 3, we analyse the fundamental features of the two policy instruments: first IPPC, then carbon trading. In sections 4 to 7 we evaluate the overlap between the instruments, the potential for interaction and conflict, and the feasibility of operating both in parallel for IPPC regulated installations. The concluding section assesses the conditions and scope for IPPC regulated installations to participate in carbon trading, and the relevance of our analysis to broader issues of policy design.

2 The regulatory framework for Integrated Pollution Prevention and Control

IPPC embraces multi-media pollution control from major industrial installations. Included is an energy efficiency requirement which could have major implications for carbon reduction policies. IPPC implementation will be phased, sector by sector. By 2008 all relevant sectors will be included: including energy intensive ones such as electricity generation, iron and steel, non-ferrous metal, cement, paper and board, and chemicals.

IPPC is a *bottom-up* regulatory permit regime. Each operator of a prescribed industrial installation must seek a permit containing emission limits and improvement targets. A prescribed installation cannot operate without this permit, which must also take account of efficiency of energy use.

IPPC contains no overall reduction targets. Negotiation of a permit will turn upon the technology-based regulatory principle 'best available techniques' (BAT). In practice, '... emission limit values...equivalent parameters or technical measures' (Article 9(3)), are set, based on the technology-based BAT principle. BAT requires a high level of technical competence on behalf of the regulator. Regulation is thus a *hands on* process.

The European Commission will produce guidance on BAT for each sector in the form of BAT Reference Documents (BREFs), but will not prescribe technology for specific cases. In the final analysis, BAT must take 'into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions' (Article 9(4)). A distinction must be drawn between

¹ This article is a condensed version of an article forthcoming in: International Journal of Environment and Pollution (IJEPE), volume 13 in 2000, 'Interaction between environmental policy instruments: carbon emissions trading and Integrated Pollution Prevention and Control'.

² Research fellows, SPRU - Science and Technology Policy Research, Mantell Building, University of Sussex, Brighton, BN1 9RF, UK. A.G.Smith@sussex.ac.uk; S.R.Sorrell@sussex.ac.uk

generic standards produced for BREFs, and the *local* limits set in individual permits.

Member State interpretation of generic standards and the way these relate to local limits will determine the ability of regulators and operators to *negotiate flexibility*. While BREF notes may support greater uniformity of environmental standards, the final decision on BAT limits in each permit is in the hands of the regulator.

There is less flexibility over *system boundaries*. The unit of regulation is the industrial installation listed in the Directive. BAT applies to fairly *fixed* industrial installations.

Success requires operators and regulators to have good information about technologies used, energy efficiency and associated emissions, and the costs and benefits. Moreover, environmental expertise will be required in order to balance releases to air, water and land. Methods for comparing impacts are inherently subjective and context dependent. Judgements are necessary, and IPPC provides for the judgements (the permit) to be *transparent* to the public. Procedures must be established for public consultation; and both the permit and monitoring records go on a public register.

The Directive requires permits to be reviewed periodically, left to the discretion of the Member State. However, if changes in BAT make it possible to reduce emissions without imposing excessive costs then the permit must be reviewed. Continuous improvement is required, with the *timetable* for emission reduction open to negotiation.

3 Emissions trading schemes

Once political processes have determined an aggregate emission limit, a fixed number of emission allowances are allocated to the sources responsible. Each source must ensure its emissions do not exceed its current allowance holdings. Those who face high pollution abatement costs can continue to pollute by buying additional allowances. Those facing low costs can take abatement action and sell their surplus allowances for a profit. So each source can trade off the cost of controlling pollution with the cost of buying or selling allowances. This flexibility allows each source to minimise its overall abatement costs, and the aggregate level of emissions is maintained efficiently. In practice, implementing trading schemes is not straightforward and success depends on details of the design.

Emissions trading developed incrementally in the United States. Attempts to introduce trading in Europe have so far been unsuccessful and have highlighted conflicts between trading and existing regulatory traditions. Kyoto expands the scope for

emissions trading. It is widely accepted that effective trading requires the direct involvement of individual companies: either through individual 'joint implementation' projects or through national carbon trading schemes.

Trading is a *top down* regulatory approach. Priority is given to the aggregate target. The final distribution of emissions is decided through trading in the allowance market. The regulator must monitor emissions, track allowance holdings, and verify individual sources do not exceed their allowance holdings and hence that the overall target is attained.

Flexibility in trading scheme is achieved through the allowance market. A well functioning market gives scope for cost effective trades with other sources. Regulation is a *hands-off* process. The regulator has no involvement in individual technology decisions - although negotiations are important during the initial design of the scheme. Disputes over the equity of initial allowance allocation can create major obstacles to introducing schemes.

Trading schemes are generally confined to a *single pollutant* in a *single media*. Kyoto is a rare exception to this as, in principle, six different greenhouse gases can be traded using global warming potential (GWP) as the exchange rate. Successful schemes require pollutants to be readily quantifiable and easily measured, and their environmental effect to be largely independent of the location of the source. Trading schemes do not prevent displacement of pollution from one media to another and are poorly suited to pollutants having multiple environmental effects. Carbon emissions from large point sources satisfy these conditions.

The *system boundary* of a scheme can be flexible. It can be confined to multiple sources at a single site, to multiple sites owned by a single company, to an industrial sector, to a region, or to an economy. A constraint is the need for certainty and predictability in a trading scheme and the difficulty of expanding the scheme once established.

Success depends upon the environmental objective being clearly defined, sufficiently stringent, and unlikely to be modified for a reasonable period of time. Kyoto provides national targets for 2008-2012. This firm *timetable* sets a framework for domestic schemes. Trading schemes are *transparent* in that the overall target and standards achieved by individual participants are public knowledge. The *legitimacy* of a trading scheme hinges on the adequacy of monitoring and enforcement and on the political acceptability of both the pollution target and allowance allocations.

It is clear IPPC and emission trading are fundamentally different policy instruments: bottom-up approach cf. top-down, hands on cf. hands off, system boundaries, sources of flexibility, transparency, and legitimacy. Recognising this difference does not mean they are incompatible. However, the differences suggest that careful implementation is required if conflict between them is to be prevented. Targets under both will be met with energy efficiency measures in industry. But how might the two instruments interact?

4 Interpretation of energy efficiency under IPPC and implications for trading

Ambiguity in the IPPC Directive allows for a range of interpretations. Member States have different regulatory traditions, and it is likely that each will read the Directive differently. Final interpretation will be influenced by decisions at four levels:

- legal guidance from the Commission;
- the BREF notes;
- legal interpretations by Member States; and
- implementation practice of the regulators.

To overcome uncertainty and variety in IPPC implementation, we analyse interaction with trading under three scenarios:

1. A *strict* interpretation: quantitative BAT limits for energy use or carbon emissions are set individually for each site.
2. A *minimalist* interpretation: energy efficiency is not interpreted as requiring quantitative limits and treated as a secondary consideration.
3. A *trading-based* interpretation: energy efficiency requirements of IPPC are assumed to be met through participation in a trading scheme. Two alternatives are of particular interest here:
 - a *local BAT allocation* scenario: site specific BAT assessments are used to guide the initial allocation of carbon allowances; and
 - a *generic BAT* allocation scenario: generic BAT assessments are used to guide the initial allocation of carbon allowances.

5 Scenario 1: a strict interpretation

Here, IPPC involves a situation in which operators have to achieve quantitative BAT standards for carbon emissions or energy use. BAT limits for energy use require assessment of the full range of energy using and energy conversion technologies at the installation, while BAT limits for carbon require additional decisions on the costs and advantages of switching to fuels with a lower carbon content.

Setting quantitative BAT limits for carbon or energy use pose some major practical challenges - associ-

ated with the nature of energy efficiency measures, the variety of installations and their circumstances, and information gaps and asymmetries between regulators and regulated.

It is difficult to see how the installation could participate in a trading scheme under this scenario. To illustrate: suppose the installation has been allocated a number of carbon allowances and that these sum to less than the current BAT carbon emission limit. Suppose further that the installation is able to operate with this number of allowances. But operating with emissions below the BAT limit immediately signals to the regulator that the BAT determination was wrong in the first place, or has become outdated. If a plant can operate with emissions below its BAT limit then it is clearly using a technology that is better and affordable. In that case, the BAT limit should be reduced to reflect this. Conversely, suppose the number of carbon allowances sum to more than the current BAT limit. The installation would be unable to make use of this flexibility as increasing emissions above the BAT limit would constitute a violation of the IPPC permit. There is no flexibility for operators struggling to meet carbon limits to buy up allowances from over-complying operators.

There is marginally more flexibility if BAT standards take the form of a limit on energy consumption; however, this is unlikely to be sufficient for trading. In this situation, energy consumption could remain at the level of the BAT limit but a switch to a lower carbon fuel could reduce the associated carbon emissions. The installation could then profit from the sale of surplus carbon allowances. The same could be achieved through an improvement in energy efficiency, but the incentive to do this is undermined by the existence of the BAT energy limit. Lowering energy consumption is likely to trigger a revision of the BAT limit and a consequent reduction in the operators' flexibility. Similarly, a switch to a more energy intensive process is precluded, regardless of whether surplus allowances are available in the allowance market.

In summary, IPPC means quantitative limits for energy use or carbon emissions, then there is effectively no room for installations to participate trading.

6 Scenario 2: a minimalist interpretation

In this scenario, the Directive is interpreted as not requiring specific BAT energy efficiency measures. Instead, energy efficiency requirements are simply interpreted as ensuring that integrated pollution control measures have no perverse, energy intensifying effects. Regard for energy efficiency becomes a back-stop measure tilting the balance in favour of

lower energy solutions to a pollution problem compared with the alternatives on offer.

This should leave room for installations to participate in trading since there would be little prescription in the IPPC permit relating to energy use, and none relating directly to carbon emissions. Thus, carbon trading could operate alongside IPPC, yet include IPPC installations. Relatively little interaction between IPPC and trading should arise, owing to the clear separation of policy targets between the two policy instruments. IPPC is an instrument for non-CO₂ pollution control, while trading is used for industrial energy efficiency.

An important point here is that a minimalist interpretation effectively prevents IPPC from becoming an instrument for reducing industrial energy use. Some parties may argue that the widening of integration implied by IPPC energy efficiency requirements is invalidated by this form of interpretation.

7 Scenario 3: a trading based interpretation

This scenario falls between the alternatives above: IPPC energy efficiency obligations are assumed to be met through participation in a carbon trading scheme. No additional obligations are imposed that restrict the flexibility to trade.

The simplest solution is for all IPPC installations to participate in trading. If only a portion participate, a decision is needed on how to interpret energy efficiency obligations for non-participants.

Interpreting IPPC in this way raises two questions:

- how many carbon allowances should be distributed; and
- how many allowances should each installation receive?

The first relates to meeting a countries' Kyoto obligations. The aggregate target in any trading scheme could be related primarily to the Kyoto target. This means that the allowance allocations to each installation could be more or less stringent than implied by site specific BAT determinations.

The second question is where the interaction between IPPC and trading could be beneficial. IPPC BAT determinations for energy or carbon could provide *benchmarks* that may help resolve initial allowance allocation.

Allocation decisions are typically presented as a choice between distributing allowances free on the basis of historic emissions (grandfathering), or selling allowances in an auction. The revenue transfers involved in auctioning tend to make them politically difficult. Grandfathering avoids this, but penalises those installations that have reduced emissions already while rewarding those that have not. To avoid this, some schemes have used *benchmarking*,

where allowance allocation is not directly related to historic emissions. The attraction of using BAT assessments in a benchmarking formula is that they include explicit consideration of costs and advantages and thereby address equity concerns. They also provide a direct link to the IPPC framework.

There are two broad possibilities for BAT benchmarking:

7.1 Scenario 3a: Local BAT benchmarking

Here, initial site-specific BAT assessments for carbon emissions are made at each installation. The assessments are then used to apportion a share of the total number of allowances between each installation. The total number of allowances is defined separately, in relation to Kyoto targets. The site-specific BAT assessment provides a *benchmark*, but the installation is not required to comply with this subsequently. Instead, the benchmark is used as one element of an allocation formula for carbon allowances. IPPC becomes the vehicle for allowance allocation in the trading scheme.

This is a more radical departure from the intent of IPPC. It may prove harder to provide adequate legal justification. It also suffers from a fundamental drawback. The use of locally determined BAT limits for allocation negates the important 'hands off' benefit of trading. The proposal compounds the cost of making local BAT determinations with the cost of administering trading.

7.2 Scenario 3b: Generic BAT benchmarking

This option avoids some of 3a's problems. Here generic BAT standards rather than local limits form the allocation basis. Industrial sectors in which installation technologies are fairly homogenous, like cement and steel, may be amenable to generic BAT standards. Carbon allowances could then be allocated using a formula like:

plant capacity (tonnes)*
generic BAT standard for energy intensity
(GJ/tonne)*
carbon intensity (tonnes CO₂/GJ)*
sectoral adjustment factor (linked to Kyoto targets)

Hence, whilst local BAT limits could prove too burdensome for allocations, generic BAT standards could be a suitable allocation vehicle in certain sectors. Not all sectors have installation technologies sufficiently homogenous to facilitate generic standards. In these sectors recourse to grandfathering and other allocation formulae may have to be made. No doubt the final allocation process will involve a pragmatic mix of benchmarking, grandfathering, negotiation and auctions. The process will

inevitably be protracted and contentious as operators lobby for their sector to be allocated carbon allowances according to their preferred methodology.

The attraction of this scenario is its use of information generated by the IPPC process to facilitate a trading scheme, while avoiding the additional burden of site level BAT assessments. Individual companies may dispute the allocation formula, but in principle will have unrestricted freedom to trade.

With both options: a) IPPC energy efficiency obligations are ensured through participation in trading; and b) the stringency of the overall target is linked to Kyoto targets.

8 Factors influencing the choice of implementation scenario

Regulatory cultures and traditions in each Member State will influence how each implements IPPC. The European Commission will also play an influential role:

1. interpretation of the energy efficiency requirements in the BREF notes may restrict the scope for Member State flexibility;
2. scope for trading could be enhanced if the Commission were to clarify the legal conditions under which it may operate;
3. the relative roles of IPPC and flexible mechanisms in the EU's Post-Kyoto strategy will be influential.

Current Communications advocate a step-by-step approach to flexible mechanisms, sees a role for an EC wide approach to emissions trading, and makes no mention of IPPC (COM (98) 353).

At the Member State level, the national regulatory culture is of primary importance. The level and quality of resources available is also crucial: staff, information, time, political support, and other resources must be sufficient. IPPC and trading will fail if regulators are ill-equipped.

9 Conclusion

Interaction between IPPC and trading will hinge on the interpretation of IPPC energy efficiency requirements. This paper identifies tensions between the two policy instruments that practitioners are only beginning to appreciate.

The following conclusions may be drawn:

- IPPC and trading are fundamentally different regulatory approaches. Some interaction is inevitable, and IPPC energy efficiency requirements must be interpreted carefully for interaction to be positive.

- IPPC is primarily suited to the promotion of discrete energy efficiency measures. The advantage of trading mechanisms is that they can promote diffuse efficiency gains.

- Energy efficiency requirements within IPPC potentially constrain the full participation of regulated installations in trading. Participation will be impossible if requirements are interpreted in a strict, quantitative BAT manner. Fuller participation may be viable if either IPPC:

energy efficiency requirements are interpreted in a minimalist way (scenario 2); or

energy efficiency requirements are assumed to be met through participation in trading (scenario 3).

- Generic BAT standards may facilitate allowance allocation. Local BAT standards for allocation could entail considerable administrative effort.
- The total number of allowances should be linked to Kyoto targets. This means that, in scenario 3, the required energy efficiency of IPPC installations will ultimately be linked to the Kyoto targets rather than BAT determinations.

The IPPC/trading case highlights a broader conflict between integrated approaches to environmental problems and market based policy instruments. Both are advocated as solutions to problems associated with earlier regulatory instruments and both are increasingly represented in European environmental policy. But neither are appropriate in all situations. Principles such as BAT are suited to complex regulatory situations where a large number of chemical compounds are emitted from many different release points. These represent common situations encountered under IPPC and would be impossible to handle with emissions taxes or tradable permits. But for point source emissions of a single pollutant into a single medium, market based instruments can have advantages.

Broader 'integration' is required in policy design in the sense that the pursuit of one objective does not undermine another. To do this we need a collection of policy instruments that target effectively the desired policy objectives. In assessing the scope for interaction it is necessary to identify the nature of the target objective (energy efficiency in this case); the features and dynamics of the relevant policy instruments; and the conditions for positive and negative interaction. It seems certain that as policy attempts to deliver sustainability grow, so the issue of interaction will grow too. Governments will need careful analysis if the policy mix is not to degenerate into a policy mess.

The EU, Environmental Considerations, and Standardizing

Bent Ole Gram Mortensen

Since the 1980s the EU has increasingly used standardizing as an alternative to harmonization through detailed public regulation. The main purpose of this harmonization is to avoid barriers to the trade within the Internal Market. The previous detailed public regulation has now been replaced by directives which lay down the general demands. The exact technical specifications are developed by the European standardizing organizations. However, it is a question whether they are capable of handling anything but the interests of harmonizations, e.g. the consideration to the external environment. This paper deals with the problems arising in connection with the transfer of the detailed regulation competence from the institutions of the EU to private standardizing organizations.

Introduction

The use of technical specifications are a natural part of any production. They can be compulsory public standards, voluntary specifications used in companies as well as recommended standards from a private standardization organization. This article will focus on standards issued by national and international standardizing organizations.

The most important international standardizing organizations are the International Organisation for Standardization (ISO) and the European Committee for Standardizing (CEN). The members are national standardizing organisations. They cover all sectors apart from the electrotechnical sector and the telecommunication sector as they have their own organisations. Furthermore, at a European level there are Comité Européen de Normalisation Electrotechnique (CENELEC) and European Telecommunications Standard Institute (ETSI). Standards from these organisations are applied in the member countries. However, standards from other countries' national standardizing organisations are also applied.

A common feature of all these organisations is that they actually act as private organisations but with a very wide circle of actors with influence especially at management levels. The composition of management normally indicates rather a semipublic than a private organisation.

The EU's interest in standardizing

For a long period the EU has shown an interest in the process of standardizing. Already back in the 1960s the Community had an interest in standards seeing them as trade barriers. In order to overcome this the EU used detailed harmonizing directives in certain areas. However, the experiences with the use of detailed regulation shows a very poor goal effectiveness. Issuing took too long, political agreement concerning the content of such rules was difficult and sometimes impossible to obtain due to the demand of unanimity in the Council's decision-

making, and finally the technical specifications were often out-dated by the technological development before they were accepted as binding norms. From 1962 to 1984, the Council passed only 159 standardizing directives or harmonizing directives (Nedergaard 1994). However, at that time the EU had already tried to introduce a regulation based on a different approach. At an early stage the EU used directives with references to existing standards laid down in environmental regulation.

There are three main reasons for this increased interest and involvement in the standardizing process. Firstly, an ever increasing complexity has emerged with the consequence of increased cost, which makes it difficult to continue the work by a voluntary workforce; secondly, it has become clear that the market forces will not necessarily secure the creation of the optimal type of standards. Thirdly, in democratic countries there is a general demand for more transparency in all decision processes (Lundvall 1995).

Based on the European Court of Justice's judgment of 20.02.1979 in the case 120/78 - Cassis de Dijon, the Commission assumed that there was a legal principle on mutual acknowledgement of standards. In 1983 it gave rise to issuing the Information Procedure Directive and later on the formalized introduction of the new approach.

The Information Procedure Directive

By passing the Council's directive 83/189/EEC of 28.03.1983 laying down a procedure for the provision of information in the field of technical standards and regulations, the Common Market actually included the standardizing process in this sphere of interest. The Directive has now been replaced by directive 98/34/EC of 22.06.1998.

Article 8 in the directive demands the Member States to inform the Commission without notice about any draft to technical directions unless it is a version of a complete international or European standard. By this the directive tries to create more

transparency in the area where technical standards are applied. In this way the EU obtains an insight which may create a basis for decisions on which areas of possible harmonizing national standards will be appropriate. Furthermore, article 2 of the directive prescribes that the Commission, the EU's national and international standardizing organisations must be informed of the standardizing programme which is completed by national standardizing organisations. Member States are directed to make sure that information from private organisations is passed on to both an authority (The Commission) and to other private organisations (the other national standardizing organisations). Furthermore, according to article 7 the Member States have to secure that national standardizing organisations neither prepare nor introduce standards in the areas where the Commission has asked the European standardizing organisations to prepare a European standard within a fixed period. As such the standardizing organisations are not seen as ordinary private companies.

According to article 9 of the directive, the Commission may require that the technical directions which the Member States want to pass be postponed for six months from the date of announcement. This can be done if the Commission gives a detailed statement regarding changes of the contemplated measure in order to remove or reduce barriers to the free exchange of goods, if any, which may be the result of the measure. If the Commission gives the impression that they will suggest or pass a directive on the said area, the respite of six months will be extended to 12 months. The European standardizing organisations have voluntarily introduced similar decisions in their rules of procedure in a status quo period. The commencement of the project with a European standard will in any case cause a status quo period for the national standardizing organisations (Nicolas 1994).

The respite, cf article 9(3), will not be enforced if due to urgent reasons which concern public health or public safety if a Member State has to prepare technical directions with very short notice. The decision does not except technical directions which are passed in the interest of environmental protection (other elements than those concerning public health and public safety). The same appears from the Council's decision 93/465/EEC of 22.07.1993 concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking, which are intended to be used in the technical harmonization directives. This regards the modules for the different stages in the procedures for the valuation of harmony and rules for placing and application in the directives on „marking of CE-

harmony“. The aim is to give the public authorities a chance to secure that products marketed fulfil the relevant demands in the directives, especially regarding users' and consumers' safety (paragraph 1.a in the guidelines). Environmental considerations are not mentioned.

The new approach

The Council's resolution of 07.05.1985 about a new approach in connection with technical harmonizing and standards may be described as the real formalizing of the use of private standards within the EU. The resolution has put forward some guidelines for technical harmonizing by using standards. Among other things the document is referring to private standardizing organisations such as CEN and CENELEC, as the organisations which as a basis must prepare and pass harmonized standards. The resolution was followed by some documents including the Commission's green book of 10.12.1990 about the development of European standardizing and Information of 27.10.1992 from the Commission - Intellectual ownership and standardizing. Later on, in its resolution of 18.06.1992 about the importance of the European standardizing for the European trade and business, the Council has requested the Commission to use references to standards in future drafts to EU legislation, where it is appropriate. However, this was already done to a considerable extent. Thus existing national and international standards were incorporated in the Council's directive 87/217/EEC of 19.03.1987 on the prevention and reduction of environmental pollution by asbestos and in the Council's directive 91/271/EEC of 21.05.1991 concerning urban waste-water treatment (Vad 1998). This approach also has an environmental dimension. In the Council's resolution of 03.12.1992 about the relationship between the industry's competitiveness and environmental protection, the Commission and the Member States are asked to encourage standardizing organisations at national and international level to a certain extent. This should attach great importance to environmental considerations in connection with the preparation of industrial standards.

Common market law regulation through standards

When the EU uses the new approach, a framework directive is issued which lists the most important demands to a new product. For instance the Council's directive 89/392/EEC of June 14, 1989 on the mutual approach of the Member States' legislation on machinery and the Council Directive 90/396/EEC of 29.06.1990 on the approximation of the laws of the Member States relating to appliances burning gaseous fuels.

In order to fill the frames of the directives with technical specifications, the Commission acts as employer by, e.g. giving CEN a contract of preparation of European standards in order to implement the harmonizing directive (a mandate). The EU pays CEN for the work. Of course, the prepared standards must comply with demands stated in the directives. Thereby, according to contractual demands the standardizing organisations are restricted as to deciding which standards must be issued in certain areas. However, the restriction is more formal than real. Standards which do not conform with the EU's standard will in no way be applied. The EU's influence on standardizing organisations is merely a promoter for preparations of standards.

This intervention from the EU in the private sector's traditional sphere may be seen as an expression of the EU and the Member States having other interests in standardizing than has the private sector. Standardizing has traditionally been a strong commercial incentive for developing standards. In certain cases national capital interests have directly been a barrier to „voluntary“ standardizing (The Commission 1998). However, the EU and the Member States have many other political interests to attend to. Examples are considerations with the environmental protection, health, safety, and creation of the Internal Market. These considerations are expressed in the article 95(3), cf paragraph 1 and article 14 of the Treaty of Amsterdam. Thereby, the Commission's proposal with a view to establishing the Internal Market within the areas of „health, safety, environmental protection, and consumer protection must be built on a high level of protection in consideration of any new development based on scientific facts“.

The technical work

The work of standardizing itself is carried out in many technical committees, sub-committees, and working groups. They are supervised by the technical committee (Bureau Technique - BT), which is in fact responsible for guiding and controlling the standardizing work. The members of this committee are those being technically responsible in the individual member organisations. The technical committee assigns the specific standardizing work to the individual technical committees, sub committees and working groups.

The working groups and the technical committees must be seen as the most important factor in the

process of preparing the standards. The working groups are in charge of the final preparation of the standards. In these groups, mainly persons with a technical knowledge on the said area are placed (Bauer & Hermind 1995). From a formal point of view the national member organisations are represented here. The representative is nevertheless often a person from a public authority, an industrial organisation, or an individual company. The participants are not paid by CEN. This has increased the possibility for companies with surplus capital to dominate the work in the technical committees by making their employees available for the technical work. Approx. 80 per cent of the participants are from the European industry (Tørres 1993).

Drafts to CEN standards are sent from CEN to the CEN member organisations, who carry out the final voting. The votes are balanced in accordance with voting weight in the Amsterdam Treaty's article 205(2) so that the large countries have 10 votes and the small countries have less. In connection with the balanced voting the following conditions must be met if the standard is passed (Nedergaard 1994):

- The number of members who accept must be larger than the number of members who reject.
- A minimum of 25 balanced votes must accept.
- A maximum of 22 balanced votes and three members must reject.

If the standard is passed, it must be carried through within six months as a national standard of the individual member organisations including those which rejected the proposal. If the proposal is rejected, a new count is made of the votes cast by the member organisations in the EU countries. If the terms of voting are met in these countries, the standard is carried through in the EU countries. Implementation of the accepted standards are made by the individual national member organisations. They have committed themselves unreservedly to implementing a valid, accepted European standard and revoke previous European and national standards.

Consumption of time when working on standards

A considerable barrier to the application of European standardizing is the time spent on preparation of the standard. The table below shows the typical course in connection with the new approach:

Process	Time spent
The Commission issues a mandate in consultation with the 83/189 committee	6-12 months
The Commission transfers the mandate to CEN	2 months
CEN approves the mandate	2.5 months
CEN prepares a programme	6-18 months
A technical committee prepares a proposal to a standard	35 months
CEN and the national standardizing organisations begin a public hearing	6 months
The Technical committee considers the comments	19 months
Voting among the national standardizing organisations and ratification by CEN	4 months
CEN sends references to the Commission, including titles for the translation	5 months
The commission publishes the reference	4 months
The national standardizing organisations transfer the European standard	12 months

In 1991 CEN's standardizing procedure lasted on an average 135 months. In May 1998 it was reduced to 75 months. CEN's own goal is 47 months (The Commission 1998). Of course such an enormous amount of time for a EU standardizing may motivate the authorities to use other instruments to conduct e.g. environmental considerations. At the same time private parties may develop other standards, without public participation, which are included in CEN's standards and later on may become a barrier to applications of EU standards.

However, the built-in conservatism in standards (dependent on the existence of a valid period and its length) is an advance for the manufacturers. The individual manufacturer wants to be sure that his investments in production equipment for his production of goods have a certain standard. He also wants to make sure that his equipment will not be worthless due to changes in standards. If there is such a safety, e.g. a certain valid period in which the standard cannot be changed, the manufacturer will also have a good reason to live up to the standards. Therefore, considering such investments the legislation of standard in the US has introduced a rule saying that technical specifications made by the Department of Energy cannot be changed until after five years from coming into force (Millhone 1992).

A great deal of the time spent in connection with the preparation of standards relates to the wish for involving/submitting non-commercial interests. The same problem relates to a traditional normative regulation. It is a political balance whether the speed of preparations are to have a high priority on behalf of the influence from such parties. An uncertainty of the political goals on the said area can make the work of standardizing more difficult and make the progress slow. Therefore, the political bodies must avoid a delegation of disagreements in the form of diffuse conditions of the frame.

Attention to environmental considerations in the process of standardizing

Many standards are important for the protection of the external environment. Environmental considerations may be directly involved in the process of standardizing through standards with a primarily environmental aim, e.g. environmental management and methods for measuring environmental quality. Indirectly, environmental considerations may be integrated through the many standards of products in different areas, e.g. appliances burning gaseous fuels, in which there is an environmental aspect.

However, it is not without concerns regarding democratic traditions in relation to the issuing of regulation to leave it to the standardizing organisations to take care of such considerations. As in the new approach these problems usually arise when standardizing is used as an alternative to the normative regulation pertaining to administrative law. Problems which may arise in this connection will be discussed below.

The market actor's responsibility

In principle the application of standards is an expression of a voluntary regulation of the market in contrast to traditional forced regulation. The application of a voluntary means is supposed to promote trade and industry's understanding of the environmental consequences which the production and the marketing of their output involve.

At the same time the application of standards is well known and accepted by the private industry. Usually the application is due to considerations regarding the economy in the company. These considerations can be seen as a reflection of voluntariness or as a result of a commercial necessity. Often, industry and trade participate in the preparation of standards, which results in a balancing between different economic interests among the different actors

from trade and industry. By participating more companies may be encouraged to comply with the voluntary standards rather than with traditional detailed regulations or the use of financial incentives since the regulated sector may find top-down regulation unfair.

Whether the standards de facto will be a success depends on the acceptance of the standards by the consumers and the other actors in the market. If the leading actors in the market demand that the specific standards are used, the application of them will spread quickly to the sub-supplier. In the same way the consumers' widespread demands for, e.g. keeping the standards of energy, will also give incentives for implementing the standard. Therefore, it is important to use standards as means. That use is seen as a positive means by the leading groups of actors. The mere creation of a standard does not ensure that it will be used.

Furthermore, an important factor is the costs connected with the introduction of the standards. They can both relate to changes in working routines and to new purchases of production equipment. The higher these expenditures, the more reluctant the industry is to implement the standards. In connection with the introduction of the standard the possibility of increasing the sales price is an important factor, too. With respect to the application of standardizing in Europe it is a problem that so far there is no cost/benefit analysis of the consequences of European standardizing (The Commission 1998).

Promotion of environmental considerations as a competitive parameter

Some market based means, e.g. information and marking, are used in the efforts of involving environmental considerations as a competitive parameter. Profiling the environment has become part of trade and industry. To the extent that environmental considerations are included in the standards, these means can be applied to the same efforts. Unlike information and marking the use of standards has a large impact. A standard which has generally been accepted in a sector will be applied to such an extent that very often products will not be manufactured or demanded if they do not comply with the stipulated standards. The possibility of choice disappears de facto.

When lending money for investment in companies creditors, insurance companies, and investors want security. When authorities, consumers, and business partners still increase their awareness in the area of environment, the company's ability to handle the environmental problems is at risk. Regarding the creditors, insurance companies, and investors the companies have a competitive advantage if it is possible for them to demonstrate a special attention

if they use process orientated standards such as EMAS (the Council Regulation (EEC) No 1836/93 of 29.06.1993 allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme) or ISO 14000-series on environmental management.

Public hearing, equality, and democratic control in the decision-making

Regulations according to administrative law are subject to the rules of democracy, whether it is in the form of a representative or indirect democracy. Contrary to this, standardizing is basically an expression for regulation according to contract. If standardizing is used as an alternative means to traditional detailed regulation pertaining to administrative law, there will be a change in influence between those interest groups which normally participate in a traditional democratic process.

Both at international and national level the standardizing process occurs without a guarantee of openness, and various interest groups have equal influence. This is valid also for environmental interests. Environmental organisations have the understanding that they are not sufficiently represented in the standardizing process which they consider to be completely controlled by the industry and the market. (The Commission 1998). By leaving regulation to the industry itself through standardizing the process, the industry can avoid public and political control. It could be said that it is mechanization whereby the problems of balancing between different considerations are covered (Tørres 1993). As many other interest organisations the environmental organisations have a resource problem. Without or with only a limited possibility to pay experts to a greater extent, the environmental organisations and other non-commercial organisations hardly have a possibility of matching the influence of industry and trade in the working committees. This is similar for small and medium sized companies.

The democratic element in the standardizing process seems problematic. Standardizing transfers some detailed regulations to a forum which is only slightly under democratic control and where many non-commercial interests have a limited influence. Especially consumer organisations seem to participate slightly in the process, a fact which was dealt with in the Commission's recommendation 88/41/EEC of 10.12.1987 on the consumers' more active participation in the work of standardizing. CEN's initiative on admitting many organisations which at a European level represent economic and social interests as „affiliates“ have given a certain influence to these actors. The organisations have in common that the EU supports their activities.

Thereby, the EU uses financial means in order to promote the engagement of non-commercial interests in the standardizing process.

A possibility for increasing the participation by the interest groups and the general public could be the use of publicity in the process and involvement of the interest organisations through hearings. The method is often used by the authorities in connection with a traditional normative regulation. Similarly, within CEN a hearing is used. However, decisions regarding guidelines and the strategic aspect are still limited to the committee of CEN and the national standardizing organisations. Furthermore, discussions of a submitted proposal demand considerable resources and have hardly the same influence as direct participation in the preparations of the standards. Such initiatives do not change the fact that detailed regulations are made in a forum where no political responsibility exists.

Harmonization in the standardizing process

CEN has been criticized for the differences in the working methods in the various working committees. Apart from waste of resources and ineffectiveness many of the first standards are vitiated with errors and drawbacks. In 1997, the Danish Standard Association (DS) introduced a certified ISO 9000 quality system in the department of standardizing. By applying a similar initiative CEN could reduce the amount of errors and defects. However, the major differences in working methods are also a more specific problem regarding the conduct of environmental considerations in connection with the standardizing work. With uneven working methods it is difficult to ensure that environmental considerations are actually included in the working process. The standardizing of the standardizing work itself could be a model of solution. ISO has made out the so-called ISO Guide 64:1997 regarding involvement of environmental subjects in standards for products. However, this guidance is not a real procedure model but more a type of guideline for writers of standards. With approval of »Guidelines on the consideration on environmental aspects in product standard« in the autumn 1999, CEN will move in that direction.

Barriers to further developments

A given standard is created on the basis of the current technological insight. Therefore, it is possible that the standard is a static element which will result in a preservative state instead of promoting further development and new technology. Especially regarding process oriented standards it can be claimed that it involves a focus on a minimum level (Drext 1992).

In connection with products intended for domestic purposes or for small companies with limited resources the keeping of standards may rob the consumer of the incentive for a real comparison with other products (Simons 1992). However, it must be emphasized that there are no barriers which prevent the individual manufacturer from going further than the standard by producing to a higher standard than prescribed. This condition as a competitive parameter, as described above, may be applied. Basically powerful large consumers may make heavier demands than those included in the standard. Regarding public tenders of suppliers which are included in the EU's tender directives, some limitations are introduced due to competitive reasons. Public authorities and companies included in these directives cannot make further environmental demands than necessary in order to obtain the planned goal. Without such limits the environmental demands would actually be a barrier to the free movement of goods and services. This would not be in harmony with the directions of the treaty or its goal on establishing an Internal Market. International standards will often be an expression of the environmental demands which would be required. If the national administrative authorities do not accept these standards, the administrative authorities have the burden of proof that discrimination is not involved.

In the environmental area the static element in standards arises as a contradiction to the principle of using the Best Available Technology (hereinafter called the BAT-principle) or the principle of using the Best Available Technology Not Entailing Excessive Costs (BATNEEC). This may especially be expressed in connection with revision of technical standards. In some cases the EU court demands implementation of the principle of application of the BAT-principle. The principle does not make specific demands but leave that to a balancing between financial and environmental considerations to make the exact technological choice. In future the technical development will outdate stipulated standards, i.e. by no means will they live up to the technological solutions which a choice according to the BAT-principle will have. Thereby a barrier arises in connection with implementation of the standard. As long as it remains unchanged the authorities pertaining to public law and others whose purchase is subject to the sales directives could enter into a conflict between the BAT-principle and the competitive considerations. They require the acceptance of products which keep the current standards. However, most standards have a valid period. By application of this the problems above mentioned are limited.

Predictability of the regulative authority

In principle, the application of standards is in principle voluntary. Therefore, there is absolutely no certainty to what extent the standard is actually used and therefore no certainty of the result of the environmental elements which may be included in the standard. This doubt is partly found in traditional top-down regulation, too. In that case the results of possible control measurements give rise to concern. Without an effective control the administrative authorities have no certainty of neither complying with the stipulated rules nor the effect of them.

By applying standardizing, the preparation of the technical standard is often left with representatives from the industry and trade interests. Without the efficient expert knowledge in the area it is difficult for the public authorities pertaining to administrative law to make sure that environmental interests to sufficient extents are integrated into specific standards. The authorities have to lay down general frames and have to control at a formal level, i.e. to see whether the technical committee has stated the reasons for preparations for the specific standard. Environmental protection considerations must also be taken into account and interest organisations must be heard sufficiently. Where standards are used as an alternative to traditional means the authorities must seek to solve this problem in connection with preparations of the general demands which are made to the standards.

Control of mandated standards

The Commission uses consultants to control whether mandated standards are in accordance with the said directive. There is not necessarily a special control regarding handling of environmental considerations. This is left to the standardizing organisations themselves. However, there are many possibilities for control.

83/189-Committee

According to the articles 5 and 6 of the directive of information procedure an advisory council composed of representatives is appointed by the Member States - the so-called 83/189-Committee named after the first directive. The committee is a standing administrative committee which discusses all mandated drafts according to the directive of information procedure. The main purpose of the committee is to advise the Commission regarding application of standard. Therefore, the Commission's preparation of mandates for the standardizing organisations is in consultation with the committee.

Therefore, the tasks of the 83/189-Committee include a role in the control of the standards. In case of disagreement in the technical committees, which are working with the preparations of mandated

standards, these disagreements are brought before the committee of civil servants. This preparation depends on the Council Directive 90/396/EEC of 29.06.1990 on the approximation of the laws of the Member States relating to appliances burning gaseous fuels (Mortensen 1999).

Public participation in the technical work

It might be appropriate for public authorities to be represented in these committees or working groups which are responsible for development of standards according to a mandate of the new approach.

On the one hand, the Commission seems interested in leaving the technical solution to the interested parties and on the other hand to be represented in committees and working groups with a view to securing special considerations as environment, health, and safety (The Commission 1998). Normally, the Commission is represented in technical committees and working groups which are specifically involved in environmental work, e.g. test standards. Typically, the Commission on the other hand is not represented in the area of product standards. However, it must be emphasized that the representatives of public authorities cannot ensure the use of specific private standards. Therefore, it is important that the standard has the consent of the industry.

Publicity as a control

References to harmonized standards approved according to the new approach are published in the Official Journal (OJ). Thereby publicity is used as an instrument for controlling results of the standardizing work. By reading the OJ both the relevant trade organisation and interest organisations have the opportunity to see the result of the harmonizing work, which is done through mandated standardizing. However, this is only a subsequent control. The possibilities for influencing the standards in a subsequent control must be regarded as inferior to the control which involves e.g. interest organisations in the technical committees and the national shadow committees. Involving other interest groups in the standardizing work itself is thereby left to organisations according to private law. In addition, interested parties of the public cannot directly learn about the contents of the standard through OJ. Typically, the standard must be bought from the national standardizing organisation first. This makes it difficult and in fact reduces the effect of public control.

Furthermore, the standardizing organisations' character of organisations according to private law results in the fact that they are avoiding the decision of access to documents from the public authorities. The Council Directive 90/313/EEC of 07.06.1990

on the freedom of access to information on the environment does not include private standardizing organisations. The rules of publicity cannot be extended to include documents and correspondence which are written in or made between standardizing organisations or companies.

Certification as private control instruments

Certainty of performance of the standard is an important factor. The receiver of output or goods must of course have a positive assurance of the performance of the standard. Otherwise the receiver himself must implement costly control procedures. Certifications might be an effective means for creating such a certainty. However, certifications in the form of self-certifications (manufacturer declaration) are relatively problematic. A company's own declaration on meeting certain standards is not always satisfying. Of course, the said company gives its declaration subject to the consequences of the law both the legislation pertaining to administrative law, which the standard may implement, and under a responsibility according to private law (remedies for defective performances and product liability). Experiences show that this „freedom subject to the consequences“ is not appropriate. Now and then in the environmental areas it will result in extensive costs. This may be due to the polluter's insolvency or lack of legal possibilities to put the responsibility into force. It will rebound both on society and the claimant.

A third party certification gives a better certainty. However, in reality it is the manufacturer himself who chooses and engages the said issuer of certificates. This gives the opportunity for shopping among various issuer of certificates, depending on their „strictness“. The issuer of certificates has as a commercial actor a natural interest in acting in such a way that the manufacturers employ him. The authorities have an interest in having the certification made in a private framework to avoid control tasks to a wide extent. At the same time the competition between different issuers of certificates ensures that the costs are probably kept low. It seems impossible to avoid this contradiction. However, the arrangement with accreditation of issuers of certificates gives them incentives to deliver a control job of good quality. The market forces pull in the same direction. If an issuer of certificates gets a reputation for not making a proper control the manufacturer's customer will no longer accept the certification made by this body.

Conclusion

Application of standardizing as an alternative to a detailed regulation is anything but unproblematic.

However, the experience with detailed regulation has been so poor that it had to be changed. Especially at EU level the political conflict of interests made it impossible to maintain the previous practice.

Application of standards as an alternative to traditional detailed regulation involves a change in the teamwork between the actors. This teamwork is in connection with preparations of norms. The changes give an increased complexity and gives rise to concern. The democratic justification, which exists in regulations according to administrative law, has disappeared. The actors' ability to dispose of financial resources seems to yield much more from the new approach than from the traditional ways of regulation. In this way environmental considerations might be set aside. However, some of these problems may be reduced on demands of increased publicity, hearings and participation of public authorities and environmental organisations in the standardizing process itself.

References

- Bauer, Bjørn og Hermind, Benét: *Miljøspekter af den europæiske standardiseringsproces*, [Environmental aspects of the European standardizing process], Report from the Danish Environmental Agency, No 21, 1995.
- Drecht, Gerard van: Standards, Essential Part of the Policy Mix for Energy Conservation and CO₂ Reduction i International Energy Agency: *International Energy Conference on Use of Efficiency Standards in Energy Policy*, Paris 1992.
- The Commission: Report of 13.05.1998 from the Commission to the Council and the European Parliament - *Efficiency and accountability in European standardisation under the new approach*, COM(1998) 291 final.
- The Commission: Commission Green Paper on the Development of European Standardization: *Action for faster Technological Integration in Europe*, COM (90) 456 final, OJ 1991 C 20/1.
- The Commission: Communication of 27.10.1992 from the Commission - Intellectual Property Rights and Standardization, COM (92) 445 final.
- Lundvall, Bengt-Åke: Standards in an innovative world in Hawkins, R.; Mansell, R. og Skea, J.: *Standards, Innovation and Competitiveness*, Edward Elgar Publishing Limited 1995.
- Millhone, John P.: *The role of Efficiency Standards in the United States i OECD: International Energy Conference on Use of Efficiency Standards in Energy Policy*. Proceedings, Paris 1992.
- Mortensen, Bent Ole Gram: *Standardisering og certificering som instrument på miljøområdet*, [Standardizing and certification as an instrument in the environmental area], DJØF Publishing, 1999.
- Nedergaard, Peter: *Internationale standarder – og deres betydning for virksomheden og samfundet*, [International Standards - and their Significance for the Business and Society], Copenhagen Business School Press, 1994.
- Nicolas, Florence: *Common Standards for Enterprises*, The Commission, 1994.
- Simons, Jürgen: Energy Efficiency Standards in a Market Economy - Regulation vs. Competition? i OECD: *International Energy Conference on Use of Efficiency Standards in Energy Policy*. Proceedings, Paris 1992. Tøres, Liv: *Nordisk standard over europeisk miljøvern*, [Nordic standard over European environmental protection], The Nordic Council of Ministers, 1993.
- Vad, Torben B.P.: *Europeanisation of Standardisation - European Institution Building and National Persistence in the Area of Technical Standardization*, University of Copenhagen 1998.

The Environmental Management System *ecoBudget* - A Model of Environmental Budgeting

Andrea Burzacchini and Christoph Erdmenger

The Aalborg Charter, signed in May 1994 by 80 European local authorities, addresses the instruments and tools available for urban management towards sustainability at the end of Part 1 :

"We, cities and towns, pledge to use the political and technical instruments and tools available for an ecosystem approach to urban management. We shall take advantage of a wide range of instruments [...] We seek to establish new environmental budgeting systems which allow for the management of our natural resources as economically as our artificial resource, 'money'" (Aalborg Charter, Part 1.14).

ICLEI has taken on the task of supporting cities and towns working towards sustainability by making local environmental budgeting available to local authorities as a comprehensive system of municipal environmental planning, controlling, and reporting. This system aims to bring together existing local environmental management instruments and to fill some of the remaining gaps.

ICLEI's approach is being piloted by 10 German municipalities funded by the German Federal Environmental Foundation (Deutsche Bundesstiftung Umwelt). By 2000 three cities (Bielefeld, Heidelberg, Dresden) and one county (Nordhausen) are going to implement environmental budgeting using the environmental management system *ecoBudget*[®].

1 Shortcomings of environmental policy and instruments

Despite the high level of regulation under German environmental law, virtually no comprehensive cross-sector planning or controlling can be found in local authorities. What is lacking is an environmentally unifying force that directs the application of measures towards conscious principles or objectives.

Experts concluded that despite the development of municipal environmental management instruments, they came to be more and more sophisticated, complicated, and less transparent, and therefore more difficult for local officials to use. Rather, more work was needed to combine them in a single, unified, comprehensible set of instruments for regulating environmental quality.

2 The concept: environmental budgeting

2.1 The idea

The concept of local environmental budgeting was conceived in conscious imitation of financial budgeting in the mid-1980s (cf. OTTO-ZIMMERMANN 1987). The idea was also suggested by scientists as a possible frame of reference for land-use planning, then as a new designation for the German Federal Nature Protection Law (cf. HÜBLER 1986, 1990).

ICLEI has adopted the idea of a local environmental budget as the political framework for directing local

communities and their authorities towards the goal of environmental sustainability.

Over the last twenty years, many important elements of financial budgeting have been transferred to the area of environmental management instruments. Auditing, reporting, controlling, account management, balancing and planning are terms which have appeared not only in the financial context, but also in relation to environmental protection. Yet the crucial component of financial management, the budget (plan), has not been transferred to the field of environmental protection and resource management.

Local environmental budgeting does not entail placing a monetary value on the environment. An environmental budget is based on environmental indicators measured in physical quantities. It does not attempt to express impacts on the environment in terms of money.

There are important similarities between financial budgeting principles and the objectives of environmental management. The principle of economic efficiency is directly comparable with ecological efficiency. This means that resources have to be used in a way that maximum benefit is achieved. Financial retrenchment can be translated by the principle of ecological sufficiency, meaning there should only be environmental spending where it is really necessary, and degrading of resources should be avoided where possible. A guiding principle in financial budgeting is to avoid overspending. This is

the challenge for the use of natural resources too: the burden of environmental debts shouldn't be placed on the next generations.

2.2 The aims

Local environmental budgeting provides local administrations and decision-makers with a framework for managing natural resources as economically as the artificial resource 'money'. The use of resources, "environmental spending", must remain within the budget limit. This limit is defined by environmental quality targets. When the budget limit is exceeded, overspending begins.

When a city council approves an environmental budget, this embodies a political decision about how much environmental spending is going to be tolerated within the budget period. Environmental budgeting thus takes into account considerations from very different political areas in the local community.

Environmental budgeting tries to assess the total environmental spending during the budget period. It takes into account not only the pollution of the local environment, but also the community's impact on the global environment. The available data, which is not always the most current and which may not be directly comparable, are placed into one framework. This makes it possible to track and compare developments and forecast future spending. It is not intended, however, to offset one kind of environmental spending against another.

In addition to the more scientific requirement for the total balancing of environmental spending, this spending should also be made transparent. Therefore, it is necessary to present it in a comprehensive and easily understandable way. Environmental budgeting converts data into information.

Beyond the presentation of environmental information, the objective is to develop a way of presentation which provides a quick and compact overview of the current environmental spending situation.

The actual figures of environmental spending on their own do not indicate whether the spending exceeds the limits or not. It is thus necessary to set a target which represents a limit up to which environmental spending can be considered tolerable. This target-setting process should be supported with scientific arguments on the one hand, and the guiding principle of sustainability on the other.

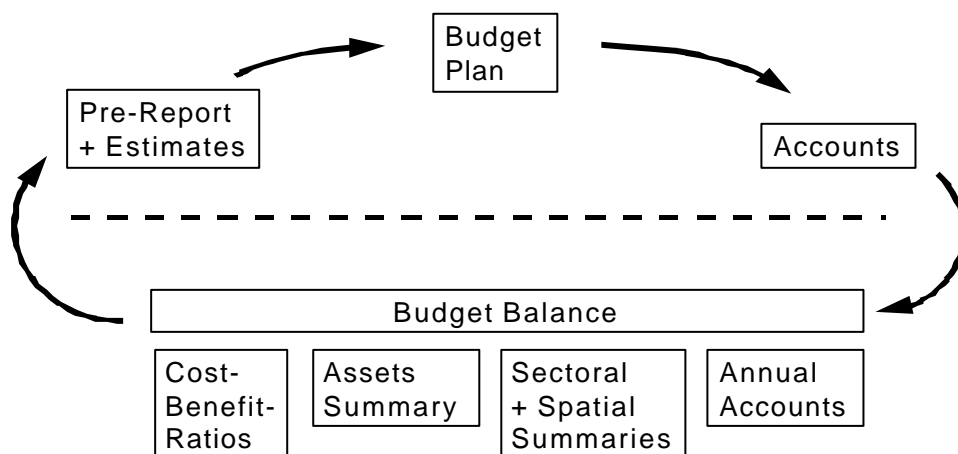
In representative bodies like city councils, there appears to be a lack of willingness to discuss environmental policies in a systematic manner and to look at conflicts of interests and contradictions. Contradictions can also exist between different environmental problem fields. For environmental budgeting to work, however, a willingness to systemise policies, set priorities and debate conflicts is absolutely necessary. The success of the instrument directly depends on whether it is accepted by the main actors and is regarded as being politically binding.

3 The system: ecoBudget

Environmental budgeting was developed in close analogy with financial budgeting. There are not only close similarities in budgetary principles, but also in the steps in the budget cycle and the involvement of politicians and public in the process.

3.1 The financial budgeting cycle

Although budgeting systems differ from country to country, most of them share some basic characteristics. The main characteristic which can be found is the annual or bi-annual budget cycle. The next picture gives an overview about the arrangement of the different elements in the budget cycle:



The budget cycle starts with a pre-report set up by the financial unit or department. Then the estimates are totalled up by the financial department, normally finding that they exceed the resources available. This draft budget is then discussed by the financial or main committee, can be changed according to political priorities for budget-setting and finally is adopted by the city council. The adopted budget (plan) sets priorities for the municipality. Adoption confers the political mandate to implement the projects foreseen in the budget. Normally the budget (plan) already describes, who exactly is responsible for carrying which out which part. For carrying out the budget (plan), accounts are set up to register the spending and to compare them with the resources available through the budget. In case of over-spending there is an emergency mechanism.

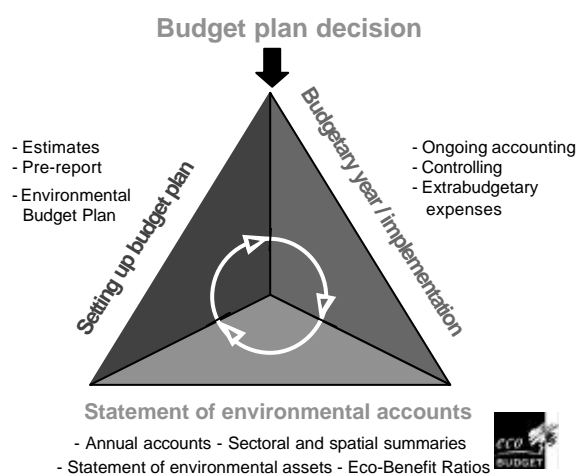
At the end of the budget year a budget balance is set up. More information about the financial situation is provided in different summaries, such as the Statement of assets and liabilities. Sometimes cost-benefit-analyses are provided.

The budget (plan) for the next year is set up with the benefit of information from the previous years' budget balance.

3.2 The environmental budgeting cycle

This budget cycle can also be applied to natural resources. Moreover the budget elements can be transferred to environmental management instruments. By doing so, an environmental management system is created, which has one big advantage: its principal function and terminology is already familiar to the public, politicians and municipal staff.

The following picture gives an overview of the environmental budgeting cycle:



Each annual (or bi-annual) budget cycle consists of the following steps:

1. Drawing up the environmental budget (plan): A budget (plan) is drawn up. The community defines its ecological spending framework for the coming budget year according to maximum rates of consumption as well as environmental targets.
2. Passing the environmental budget (plan): Following public presentation and discussion, the environmental budget is passed by the city council or county. This decision is to be regarded as voluntarily binding on the local administration.
3. Implementation of the environmental budget (plan): During the budget year, the implementation of and adherence to the environmental budget is supervised through environmental monitoring and controlling.
4. Statement of environmental accounts: At the end of the fiscal year, the budget balance, including a balance for each account, is prepared. Furthermore there can be informative elements like spatial and sector summaries, which combine the information included in the single accounts. A statement of environmental assets should be set up to describe the natural assets available and make long-term developments apparent - be they positive or negative. By creating eco-benefit-ratios the relationship between environmental spending and social benefits achieved can be made transparent. All this can be published in an environmental report.

The environmental budget cycle ensures that objectives are not only discussed but actually adopted, that implementation is controlled and that experiences are considered in the next cycle.

4 What the elements look like

4.1 Environmental budget (plan)

As stated before, the basic building blocks of the environmental budget (plan) are "environmental spending allowances". They refer to natural resources and are expressed through physical indicators. Projected values for the following budget year are displayed along with middle- or long-term environmental targets. The last column shows the "distance-to-target" – that is, how much of the planned improvement from the starting point to the long term target still remains to be achieved is indicated by the planned achievement of the target. The next picture shows an example from a budget (plan):

Middle-term targets

Air quality	1980	1990	1997	2005	Dis-tance
SO ₂ Emis-sions (tons)	38	14	12	10	50%
CO Emis-sions	5000	4800	4000	500	81%

Plan 97-actual 90
target 2005 – actual 90

To start out 10-15 indicators (depending on the size of the city, administrative capacity and data availability) will be included in such a system. New environmental indicators can be added to the system at any time.

A *comprehensive budget* displays the ecological problem areas and gives a general overview. Within it, a more detailed *single budget* for each problem area provides information about the way environmental spending is divided into different sectors (e.g. agriculture, industry, private households) or spatial units (e.g. districts).

Ongoing 'accounting' either confirms that the targets in the budget can be met or reveals the need for action, should there be considerable deviation from the planned value. Even if ecological overspending

can not be avoided, it would have to be accounted for.

This model of concurrent accounting is an idealised one. In practice it is very difficult to keep up to date with the effects happening in the real world. In some cases it will be a great step forward to have values for environmental spending on a yearly basis.

At the end of the budget year a statement of environmental accounts is set up to compare the planned values with the achieved results through the budget year. The actual table therefore looks very similar to the budget (plan).

Additionally there is some other important information given. For a budget it is not only necessary to know about the resource flows, but also about the resource stocks and the efficiency with which the resources are used.

4.2 Environmental assets

The stocks can be represented through a statement of environmental assets, which is shown in the next picture. Here the raw material stocks are recorded, but also assets that indicate e.g. the biodiversity potential. The statement of environmental assets represents a longer timescale than the comprehensive plan:

	1950	1980	1990	1997
Carbon-Stock (in kg C)				
Forests	447.400	410.610	418.155	423.972
Agriculture	691.870	676.424	684.603	606.862
Parks, gardens, ...	347.538	332.013	324.600	319.044
Peat, humus	32.653	70.653	199	71.063
Biotic raw materials				
Wood in m ³	48.498	40.797	46.605	41.254
Peat in m ³	36.270	32.762	35.488	33.216
...more indicators				

4.3 Eco-Benefit-Ratios

Environmental efficiency is the extent to which environmental spending contributes to the fulfilment of human needs. This can't be judged in terms of a fixed target, but that should be continuously improved. An example of 'Eco-Benefit-Ratios' is given in the next picture:

	Bielefeld	Dresden	Heidelberg	Nordhausen
<i>CO₂-Emissions per employed person (in t/employee)</i>				
Industry	20	15	10	35
Other Business	10	8	5	20
Public sector	10	8	5	20
<i>more Indicators</i>				
...

5 Integration of environmental management instruments in *ecoBudget*

A number of environmental management systems are already being used and there is extensive experience to build on. Here there are some examples how existing Environmental Management Instruments can be applied together with *ecoBudget*.

Environmental Impact Assessment (EIA). Under environmental budgeting existing EIAs provide important data on the impacts of projects. This is especially important for the controlling process during the budget year. EIA can profit from *ecoBudget* because of clear targets and therefore clear standards to evaluate results.

Strategic Environmental Assessment (SEA), unlike EIA, applies to the whole process. SEAs could, contribute very valuable information to setting up the budget (plan).

The idea of keeping *ecological accounts* has appeared every now and then during the 90s. Accounting is an essential part of the implementation phase of the environmental budget (plan).

As stressed before, target-setting is an important element in the management loop. The most scientific approach is the definition of *environmental quality targets*. In the *ecoBudget*-system targets are

set up on a yearly and on a multi-annual basis within the budget (plan). These targets do not necessarily build on environmental quality targets, but can also be derived from existing plans at the local level or recommendations of experts on higher levels.

5.1 Use of Indicators in *ecoBudget*

An indicator is a single piece of data representing the status of a larger system. Indicators gain strength when they are accepted by a broad public consensus as significant for development.

Discussion on indicators often reveals that several aspects are not reflected by the selected indicators. The temptation then is to add more indicators, with the consequence that the indicator system no longer fulfils its main function of simplifying communication.

Ideally, indicators in environmental budgeting should respond to the following principles:

- indicators are formulated precisely and with clear reference to which data are to be used
- indicators are based on reliable data
- indicators allow for the comparison of (environmental) conditions of different years
- indicators reflect the topic identified and are adequate in terms of quantity and complexity to the target groups

Each element in environmental budgeting has its own indicator requirements. The following table presents the different types applied in the *ecoBudget*-system:

Pressure indicators (budget (plan))	show environmental spending in physical values or numbers
Assets indicators (Statement of environmental assets)	show the stocks of environmental resources
Efficiency indicators (Cost-Benefit-Ratios)	indicate the environmental cost of meeting human needs

5.2 Examples of indicators and targets

The following list samples some examples of indicators chosen and targets set by the model local authorities applying *ecoBudget*.

Resource used	Indicator	mid-term target	Source/Justification
Climate stabilisation function of the atmosphere	CO ₂ -Emissions from fossil fuels per capita	25% (1987-2005) 50% (1987-2010)	Resolution of the city council when joining the Cities for Climate Protection Campaign
Human health deprived by ground-level Ozone	Number of days with high O ₃ -concentration	0 days with 8h medium above 110 µg/m ³ (by 2000)	WHO Guidelines 1987
Human health deprived by ground-level Ozone	Number of apartments affected by high O ₃ -concentrations	No apartments with 8h medium above 110 µg/m ³ (by 2000)	WHO Guidelines 1987
Human health deprived by ground-level Ozone	NO _x -Emissions	80% (1987-2005)	Advisory council on environmental questions of the German government
Human health deprived by ground-level Ozone	VOC-Emissions	80% (1987-2005)	Advisory council on environmental questions of the German government
Human health deprived by NO_x	Number of exceedances	No exceedance of 24-h-medium of 100µg NO ₂ /m ³	VDI regulation (association of engineers, private body)
Human Wellbeing affected by urban climate	Building activities on areas with urban climate function	0	Local land use plan
Quantity of Ground-water resources	Drinking water consumption	< 110 litres per capita per day	Recommendation by German urban development pilot project
Quality of Ground-water resources	Maximum of Nitrate concentration in Groundwater	< 50mg/l	German federal law for drinking water
Quality of Ground-water resources	Number of contaminated sites	45 until 2005 (instead 56 in 1998)	local target
Soil functions degraded by soil sealing	Ratio of newly sealed to unsealed soil	1:1 until 2010	Recommendation by Wuppertal Institute
Acid buffer function of soil	NO _x -Emissions	80% until 2005	Recommendation by Advisory council on environmental questions of the German government
Biodiversity	Building activities on nature protection reserve areas	0	Local classification and target
Landscape	Waste deposited	31.323 t/a until 2005 (= 310 kg/capita)	Minimum scenario of waste management concept
Non-renewable resources	Withdrawal of gypsum and Anhydrit	25% reduction (1995-2010)	Recommendation by Wuppertal Institute
Non-renewable resources	Non-recycled waste	191 kg/Inh./year until 2005	Waste management concept
Silence	Hours of Noise above limit	0 hours above 55 dB(A) at night	German Standard Norm

Table 1: Examples of indicators and targets used within *ecoBudget*

References

- Hübler, Karl-Hermann, Anforderungen an eine umfassende Naturschutzpolitik aus fachlicher Sicht, in: 10 Jahre Bundesnaturschutzgesetz, Erfahrungen und Erfordernisse, p.55, Jahrbuch für Naturschutz und Landespflege, Arbeitsgemeinschaft beruflicher und ehrenamtlicher Naturschutz e.V. (ABN) 39/87, Greven 1986
- Otto-Zimmermann, Konrad, Plädoyer für eine kommunale Naturhaushaltswirtschaft. In: Der Landkreis 6/1987, p 250-252

- Hübler, Karl-Hermann, Naturhaushaltswirtschaft - Ein Aufgabenfeld für die Raumplanung? In: Aktuelle Aspekte der Regionalplanung, Akademie für Raumforschung und Landesplanung, Nr. 167, Hannover 1990, p.54-64
- Erdmenger, Christoph, Otto-Zimmermann, Konrad, Buchanan, Karen, Burzacchini, Andrea, Local Environmental Budgeting, concept description, second revised edition, 41p., ICLEI, Freiburg (Germany) 1999

Links

- <http://www.iclei.org/ecobudget>

Environmental Legislation in India: Some Developments in the Nineties

Rajkumar Deepak Singh*

In India, many scattered and piecemeal environmental provisions which were incidental to the law's principal object held the field until the 1970s. However, the 1972 Stockholm Conference prompted India to initiate legislation to deal specifically with environmental protection. Thus, the post-Stockholm era witnessed the enactment of the Wildlife Act, 1972¹, the Water Act, 1974², the Water Cess Act, 1977³, the Forest Act, 1980⁴, the Air Act, 1981⁵ and the Environment Act, 1986⁶. In addition to these, many state governments also enacted special laws for protecting and improving the environment.

This article examines the post-Rio developments in environmental legislation, mostly those in the form of delegated legislation. Therefore, it does not delve into any of the pre-Rio Acts of Parliament and Rules made thereunder, which of course are no less significant in promoting environmental protection.

1 Acts of Parliament

The 1992 Rio Conference gave fresh impetus to the development of environmental law in India. To fulfill its commitments made in various international environmental fora, the Indian legislature has enacted two Acts during the 1990s, viz. the National

Environment Tribunal Act, 1995 and the National Environment Appellate Authority Act, 1997.

The National Environment Tribunal Act, 1995⁷

The *National Environment Tribunal Act* (NETA) was adopted in Parliament on 17 June 1995. NETA establishes the National Environment Tribunal for effective and expeditious disposal of cases arising out of any accident occurring while handling hazardous substances and provides for compensation in case of death of, or injury to, a person and damage to property and the environment arising out of such accident. Liability in such cases is *strict* in that the owner (i.e. person who owns, or has control over handling, any hazardous substance at the time of accident) is liable to pay compensation without the requirement of proof of any wrongful act, neglect or default of any person. However, claim for compensation is entertained only if made within five years of occurrence of the accident. The Tribunal may also take up claims for compensation *suo moto*.

The Tribunal envisaged to be established by the Central Government under the Act shall have the same jurisdiction, powers and authority granted to a Collector under the *Public Liability Insurance Act, 1991*. The Tribunal is empowered to summarily reject a claim for compensation. If the claim is ad-

* Senior Law Officer, Centre for Environmental Law, World Wide Fund for Nature-India, 172-B Lodi Estate, New Delhi - 110003, INDIA. The views expressed in this article are that of the author and do not necessarily reflect those of CEL/WWF-India.

¹ The Wildlife (Protection) Act, 1972, Act No.53 of 1972 dated 9 September 1972. The Act provides for the protection of wild animals, birds and plants and for matters connected therewith.

² The Water (Prevention and Control of Pollution) Act, 1974, Act No.6 of 1974 dated 23 March 1974. The Act provides for the prevention and control of water pollution, for maintaining or restoring of wholesomeness of water, for the establishment of Boards to prevent and control of water pollution, and for conferring powers and functions to such Boards, and for matters connected therewith.

³ The Water (Prevention and Control of Pollution) Cess Act, 1977, Act No.36 of 1977 dated 7 December 1977. The Act provides for the levy and collection of a cess on water consumed by persons carrying on certain industries and by local authorities, with a view to augment the resources of the Boards set up for the prevention and control of water pollution.

⁴ The Forest (Conservation) Act, 1980, Act No.69 of 1980 dated 27 December 1980. The Act provides for the conservation of forests and for matters connected therewith.

⁵ The Air (Prevention and Control of Pollution) Act, 1981, Act No.14 of 1981 dated 29 March 1981. The Act provides for the prevention, control and abatement of air pollution, for the establishment of Boards, and for conferring powers and functions relating thereto.

⁶ The Environment (Protection) Act, 1986, Act No.29 of 1986 dated 23 May 1986. The Act provides for the protection and improvement of environment and for matters connected therewith.

⁷ Act No.27 of 1995 dated 19 June 1995.

mitted, compensation may be awarded after giving the parties an opportunity of being heard and holding an inquiry into the claim(s). The Tribunal is guided by the principles of natural justice and is not bound by the procedure laid down by *the Code of Civil Procedure, 1908* (CPC). However, in the discharge of its functions, it has the same powers as are vested in a civil court under the code. An appeal against the award of the Tribunal lies only in the Supreme Court, but not the award made with the consent of the parties. Failure to comply with an order made by the Tribunal is punishable with an imprisonment of up to three years, with a fine up to ten lakh rupees or with both.

*The National Environment Appellate Authority Act, 1997*⁸

The Indian legislature enacted the National Environment Appellate Authority Act on 26 March 1997 to establish a National Environment Appellate Authority. The Authority is empowered to hear appeals with respect to restriction of areas in which any industry, operation or process is not to be carried out or to be carried out subject to safeguards under EPA. The Authority, located at New Delhi, is authorised by the Central Government to determine its powers and functions. It has the same powers as are vested in a civil court under CPC while trying a suit, but it is not bound by the procedure laid down in the Code. It has the power to regulate its own procedure including the fixing of place and time of its inquiry and deciding whether to sit in public or in private. However, power to amend its provisions and to make rules for carrying out the provisions of this Act lies with the Central Government.

Whoever is aggrieved by an order granting environmental clearance in a given area for establishing an industry, operation or process may appeal to the Authority within thirty days. This period may be extended to ninety days on showing sufficient cause. The Authority must dispose of the appeal within ninety days of the date of filing the appeal. Failure to comply with any order made by the Authority entails an imprisonment of up to seven years or fine up to one lakh rupees or both.

2 Delegated Legislation

The Indian legislature has conferred the Central Government with extensive rule-making powers.⁹ EPA empowers the Central Government to take all

such measures that it deems necessary or expedient for the purpose of protecting and improving the environment. Such measures may include those with respect to environment quality standards, emission standards, restriction on location of industries, operations or processes, safeguards for the prevention of environmental accidents, safeguards for handling of hazardous wastes, carrying out investigations and environmental research, establishment of environmental laboratories and institutes, dissemination of environmental information, and preparation of manuals etc. The Central Government may also constitute an authority or authorities for the purpose of exercising and performing the powers and functions of the Central Government provided under this Act.¹⁰ It may make rules in respect of all or any of the matters referred to above.¹¹ The general rule-making power for the purposes of carrying out the provisions of this Act is conferred on the Central Government and rules made under this provision may provide for the maximum allowable emission limit of environmental pollutants, the procedure and safeguards for the handling of hazardous substances; the agencies to which excess emission of pollutants has to be intimated; the manner of collecting and submitting samples of air, water, soil etc. for analysis; the functions of environmental laboratories; qualifications of the Government Analyst; and the manner of giving notice of an offence and intention to make a complaint to the Central Government.¹²

Some of the Rules and Notifications issued and Authorities constituted by the Central Government under the various provisions of EPA are discussed briefly below:

2.1 Rules

*The Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996*¹³

The Rules which primarily deal with management of chemical accidents¹⁴ provide for the constitution of Crisis Groups at the Central, State, District and Local levels. The Central Government is empowered to set up a Crisis Alert System and for this purpose it may set up a functional control room and an information networking system, publish a list of major accident hazard installations, publish a list of

⁸ Act No.22 of 1997 dated 26 March 1997.

⁹ Delegated legislation may mean (i) exercise by a subordinate agency of the legislative power delegated to it by the legislature, or (ii) the subsidiary rules themselves which are made by the subordinate authority in pursuance of the powers conferred on it by the legislature. See Jain and Jain, *Principles of Administrative Law*, 1986, p.26.

¹⁰ The Environment (Protection) Act, 1986, section 3(3).

¹¹ *Ibid*, section 6.

¹² *Ibid*, section 25.

¹³ The Gazette of India, G.S.R.347(E), 1996.

¹⁴ Section 2(a) defines chemical accident as "an accident involving a fortuitous, sudden or unintended occurrence while handling any hazardous chemicals resulting in continuous, intermittent or repeated exposure to death, or injury to, any person or damage to any property but does not include an accident by reason only of war or radio-activity."

members of the Crisis Groups, and take measures to create awareness about chemical accidents. The Central Crisis Group is the apex body to deal with major accidents and to provide expert guidance for handling major chemical accidents. The functions of the Central Crisis Group include monitoring post-accident situation, suggesting preventive measures, checking recurrence of chemical accidents, evaluating responses to accidents, reviewing district off-site emergency plans, responding to queries from State and District Crisis Groups, and rendering financial and infrastructural help to States.

The State Crisis Group constituted by the State Government is the apex body in the State to deal with major chemical accidents and its functions include reviewing District off-site emergency plans, assisting the State Government in managing accidents, monitoring post-accident situation, and responding to queries from District Crisis Group. The State Government is also empowered to constitute District and Local Crisis Groups. The District Crisis Group, which is the apex body in the district, assists in the preparation of district off-site emergency plans, reviews on-site emergency plans, assists the district administration in the management of chemical accidents, continuously monitors such chemical accidents, ensures continuous information flow and forward report of accident to State Crisis Group. The Local Crisis Groups, on the other hand, is a body in industrial pocket to deal with chemical accidents. Its functions include preparing local emergency plans for industrial pockets, ensuring dovetailing of the local emergency plan with the district off-site emergency plan, training personnel, educating people about remedies and preparation of chemical accident, and responding to public inquiries.

The Bio-Medical Waste (Management and Handling) Rules, 1998¹⁵

These Rules, which provide for safe management and handling of bio-medical waste (BMW), mandate every occupier of an institution generating BMW to ensure that such waste is handled without any adverse effect to human health and the environment. BMW is classified into different categories and its treatment and disposal are accordingly laid down. The methods of treatment and disposal of BMW under different categories, such as human anatomical waste, animal waste, microbiology and biotechnology waste, waste sharps, discarded medicines and cytotoxic drugs, solid waste, liquid waste, incineration ash and chemical waste, are provided in Schedule I and they have to meet the operating and

emission standards provided in Schedule V. The Rules also provide for the setting up of BMW treatment facilities like incinerators, autoclave and microwave systems for treatment of waste.

The Rules provide that BMW should not be mixed with other wastes. It is to be segregated into containers/bags at the point of generation and labelled. Transportation of untreated BMW is possible only in vehicles authorised for the purpose. Storage of untreated BMW is allowed only for 48 hours.

Every occupier of clinics, dispensaries, pathological laboratories, blood banks servicing more than 1000 patients a month who generates, collects, receives, stores, transports, treats, disposes and/or handles BMW in any form, and every operator of a BMW treatment facility must apply for grant of authorisation in the prescribed form. The prescribed authority established by the State/Union Territory Government for the purpose, after such enquiry as it deems fit, may grant or renew an authorisation within 90 days of receipt of the application. A grant or renewal of authorisation may be refused after giving reasonable opportunity of being heard and for reasons recorded in writing. The Rules also provide for annual reporting by occupier/operator, maintenance of records relating to management, and handling of BMW and reporting in case of accidents.

The Recycled Plastic (Manufacture and Usage) Rules, 1999¹⁶

To regulate the manufacture and usage of recycled plastic carry bags and containers, the Central Government notified on 2 September 1999 *the Recycled Plastics (Manufacture and Usage) Rules, 1999*. The Rules prohibit the use of carry bags or containers made of recycled plastics for storing, carrying, dispensing or packaging of foodstuffs¹⁷. However, carry bags and containers made of virgin plastics may be manufactured if they are in natural shade or white. In case of those made of recycled plastics and used for purposes other than for storing and packaging foodstuffs, it is necessary to use pigments and colourants as per the standards specified by the *Bureau of Indian Standards* (BIS). Products made of recycled plastics must be marked 'recycled' and must indicate the percentage of recycled material used. The thickness of the bags should not be less than 20 microns.

The Rules empower the State Board in respect of States and the Pollution Control Committee for Union Territories to enforce the provisions relating

¹⁵ The Gazette of India, S.O.630(E), 20 July 1998.

¹⁶ The Gazette of India, S.O.705(E) dated 2 September 1999.

¹⁷ Section 2 (b) of the Rules defines foodstuffs as "ready-to-eat food and food products, fast food, processed and cooked food in liquid, powder, solid or semi-solid form".

to manufacture and recycling, and the District Collector/Deputy Commissioners to enforce those relating to use, collection, segregation, transportation and disposal of recycled plastics.

2.2 Notifications

The Coastal Regulation Zone Notification, 1991¹⁸

For regulation of the long coastal stretches of India, the Central Government issued the Coastal Regulation Zone (CRZ) Notification on 19 February 1991 and imposed restrictions on the setting up and expansion of industries, operations and processes in this zone. CRZ is defined as the coastal stretches of seas, bays, estuaries, creeks, rivers and backwaters which are influenced by tidal action (in the landward side) up to 500 meters from the High Tide Line (HTL) and the land between the Low Tide Line (LTL) and the HTL. The Notification lays down activities prohibited within CRZ with exceptions at appropriate places. Such activities include

- (i) setting up of new industries and expansion of existing industries,
- (ii) manufacture, handling, storage or disposal of hazardous substances,
- (iii) setting up and expansion of fish processing units including warehousing,
- (iv) setting up and expansion of units/mechanisms for disposal of wastes and effluents,
- (v) discharge of untreated wastes and effluents from industries, cities or towns and other human settlements,
- (vi) dumping of city or town waste for the purposes of landfilling or otherwise,
- (vii) dumping of ash or any wastes from thermal power stations,
- (viii) land reclamation, bunding or disturbing the natural course of sea water,
- (ix) mining of sands, rocks and other substrata materials,
- (x) harvesting or drawal of groundwater and construction of mechanisms therefor within 200 m of HTL,
- (xi) construction activities in ecologically sensitive areas,
- (xii) any construction activity between LTL and HTL, and

- (xiii) dressing or altering of sand dunes, hills, natural features including landscape changes for beautification, recreational and other such purpose.

All other permissible activities are regulated by a clearance mechanism. Thus, clearance is mandatory for any activity which requires water front and foreshore facilities. Environmental clearance is also essential for

- (i) construction activities related to defense requirements for which foreshore facilities are essential,
- (ii) operational constructions for ports, harbours, light houses and constructions for activities such as jetties, wharves, quays and slipways,
- (iii) thermal power plants (only foreshore facilities for transport of raw materials) and
- (iv) activities with investment exceeding rupees five crores.

The Notification requires the coastal States and Union Territory Administrations to prepare Coastal Zone Management Plans which shall identify and classify the CRZ areas within their respective territories in accordance with the guidelines provided in the Notification. To regulate development activities within CRZ, the zone is classified into four categories and norms for regulating activities are provided in each category. The Notification lays down elaborate guidelines for development of beach resorts/hotels in CRZ-III for temporary occupation of tourist/visitors. The coastal regulation policy of India is flexible enough to meet the exigencies of the situation and thus it has been amended many times in the recent past.

The Environmental Impact Assessment of Development Projects Notification, 1994¹⁹

The Notification seeks to regulate expansion or modernization of any activity, if pollution load is to exceed the existing one, or any new project falling under any of the 29 categories listed in Schedule I. In such cases, environmental clearance is to be obtained from the Central Government.

For securing an environmental clearance, an application is to be submitted to the Central Government in the specified proforma. The application must be accompanied by a project report which includes *inter alia* an Environmental Impact Assessment Report/ Environment Management Plan and details of public hearing conducted in accordance with the

¹⁸ The Gazette of India, S.O.114(E) dated 19 February 1991 as amended by S.O.595(E) dated 18 August 1994, S.O.73(E) dated 31 January 1997, S.O.494(E) dated 9 July 1997, S.O.334(E) dated 20 April 1998, S.O.873(E) dated 30 September 1998, and S.O.1122(E) dated 29 December 1998.

¹⁹ The Gazette of India, S.O. 60(E) dated 27 January 1994 as amended by S.O.356(E) dated 4 May 1994 and S.O.318(E) dated 10 April 1997.

requirements of this Notification.²⁰ In case of site specific projects such as mining, pit-head thermal power stations, hydro-power and major irrigation projects, ports and harbours (excluding minor ports), prospecting and exploration of major minerals in areas above 500 ha., the project authorities have to intimate the location of the project site to the Central Government.

The Impact Assessment Agency (IAA) i.e. the *Ministry of Environment and Forests* evaluates and assesses the reports and if necessary a Committee of Experts (CoE) set up for the purpose is consulted. CoE has right of entry and inspection of the site or factory premises. Based on the technical assessment of documents and data furnished by the project authorities, data collected during sites visits and details of public hearing, environmental clearance is granted for a period of five years from commencement of the construction or operation of the project. To facilitate effective monitoring, the project authorities have to submit a half-yearly report to IAA.

*The Fly Ash Notification, 1999*²¹

Recognising the need to restrict the excavation of top soil for manufacture of bricks and promote the utilization of fly ash, the Central Government by a Notification dated 14 September 1999 seeks to regulate the use of fly ash, bottom ash or pond ash in the manufacture of building materials and in construction activities, and their utilization by coal or lignite-based thermal power plants (TPPs). The Notification specifies that anybody within a radius of fifty kilometers of a TPP has to mix at least 25 percent of ash by weight with soil while manufacturing clay bricks, tiles or blocks for use in construction activity. Non-compliance of the above specification shall entail cancellation of consent order issued to establish the brick kiln as well as cancellation of mining lease. To facilitate actual use of ash, TPPs are required to maintain monthly records of ash made available to each brick kiln. For resolving any dispute arising out of the use of ash, each TPP has to constitute a dispute settlement committee.

The Notification indicates the manner in which ash generated by TPPs are to be utilized. Ash from TPPs are to be made available for at least ten years, without any payment or any other consideration, for manufacturing ash-based products such as cement, concrete blocks, bricks, panels; for construction of roads, embankments, dams, dykes; and for any other construction activity. As regards dumping and disposal of ash on land, they are to be phased out

within a stipulated time in accordance with the Action Plan of each TPP or with the one to be formulated, if not already in existence.

The Notification further provides that manufacture of ash-based products, use of ash in construction activity or use as landfill to reclaim low lying areas shall be carried out in accordance with specified guidelines laid down by various agencies specified in the Notification. Construction agencies have to prescribe the use of ash and ash-based products in their schedules of specifications and construction applications whereas local authorities have to prescribe their use in the building bye-laws and regulations, both within a period of four months.

2.3 Authorities

*The Aquaculture Authority Notification, 1997*²²

To prevent the abuse of coastal land by the shrimp culture industry, the Central Government under the powers conferred by section 3(3) of IPA issued a Notification on 6 February 1997 for the establishment of an Aquaculture Authority consisting of environmental experts and government representatives at the national level. The Authority is empowered to issue directions including the power to direct the closure, prohibition or regulation of any industry, operation or process; or stoppage or regulation of the supply of electricity or water or any other service. It may also take such measures including restriction of areas for operation of such industries etc.; laying down procedures and safeguards for the prevention of environmental accidents; carrying out and sponsoring investigations and environmental research etc. It shall also ensure that no shrimp culture pond is constructed within CRZ and up to 1000 m. of Chilka lake and Pulicat lake; that agricultural lands, salt pan lands, mangroves, wetlands, forest lands, lands for village common purposes and public lands are not converted for construction of shrimp culture ponds; that traditional aquaculture farmers are provided with improved technology for increased production; and that schemes to reverse environmental damage to coastal ecology are framed. It may deal with any environmental issue pertaining to coastal areas with respect to shrimp culture farming. The Authority located at Chennai has jurisdiction over all coastal States and Union Territories.

²² The Gazette of India, S.O.88(E) dated 6 February 1997 as amended by S.O.173(E) dated 7 March 1997, S.O.421(E) dated 30 May 1997, S.O.493(E) dated 8 July 1997 and S.O.774(E) dated 10 November 1997.

²⁰ Procedure for public hearing is provided in Schedule IV of the Notification.

²¹ The Gazette of India, S.O. 763(E) dated 14 September 1999.

*The NCR Delhi Environment Authority Notification, 1998*²³

To deal with environmental matters with respect to the National Capital Region of Delhi, the Central Government issued a Notification on 29 January 1998 to constitute an Authority known as the *Environment Pollution (Prevention and Control) Authority*.

The Authority has powers to issue directions in respect of complaints relating to the violation of an order by any authority. It shall take such measures pertaining to environment quality standards, emission/discharge standards, restriction of areas for operation of industries, procedures and safeguards for the prevention of accidents which may cause environmental pollution, and procedures and safeguards for the handling of hazardous substances. In respect of any action taken to ensure these measures, the Authority has power of entry, inspection, search and seizure, and also the power to take samples of air, water, soil or any other substance. The Authority is also obliged to ensure compliance/maintenance of specific emission standards, fuel quality standards, ambient noise standards, and coordinated action for traffic planning and management. The Authority has power to make complaint against offences made under EPA or for non-compliance of its own directions. It has to furnish a progress report about its activities to the Central Government at least once in two months.

²³ The Gazette of India, S.O.93(E) dated 29 January 1998.

3 Conclusion

There has been a flurry of legislative activities in the 1990s, especially in the post-Rio era. While the Central Government has shown innovation in enacting laws in hitherto uncovered sectors of environmental protection, it has also been amending old legislation to bring it in line with new challenges.

Under the powers conferred by EPA, the Central Government has been issuing numerous Rules, Notifications etc. to deal with different aspects of environmental protection. Issues covered so far include management and handling of bio-medical wastes, manufacture and usage of recycled plastics, regulation of development activities in coastal areas, regulation on expansion or establishment of certain categories of industries, restriction on the use of fly ash in construction activities, constitution of Authorities to deal with different sectors of the environment, and so on. The Central Government has also issued numerous Draft Rules such as *the Draft Ozone Depleting Substances (Regulation) Rules, 1998*; *the Draft Environment (Siting of Industrial Projects) Rules, 1999*; *the Draft Noise Pollution (Control and Regulation) Rules, 1999*; and *the Draft Municipal Solid Wastes (Management and Handling) Rules, 1999*. These Draft Rules shall become final after due consideration of the objections or suggestions of the public. Thus, the legislative zeal shown by the Central Government has led to a wide array of environmental legislation covering different aspects of the environment. Yet it is to be seen how effectively these pieces of legislation face the environmental challenges of the new millennium.

Environmental Law Principles in the Jurisprudence of German Administrative Courts*

Gerhard Roller

1 Introduction

Environmental law principles play an important role in German environmental law. Already in 1973 Eckard Rehbinder provided the first comprehensive analysis of the polluter-pays-principle in Germany;¹ at the time, the environmental law era had only just begun. Originally considered a political guideline, Parliament laid down the most important principle, the ‘Vorsorgeprinzip’ (precautionary principle), in 1976 in s. 5 (1) (2) of the *Federal Emissions Control Act*² (federal ambient air quality protection legislation).³

As for the legal status of the principles in general, the predominant view has been that they are of no directly binding legal effect unless Parliament has explicitly incorporated them into specific legislation.

In German academic and political discussions, no unanimously accepted classification of the principles has emerged, and even the number of principles that should be considered as ‘main’ environmental law principles tends to vary from one author to another.⁴ At least three of them - the precautionary principle, the polluter-pays principle, and the cooperation principle – should be treated as paramount legislative guidelines that were expressly recognized as such in Art. 34 of the *‘Einigungsver-*

*trag’ (Reunification Treaty)*⁵ of 1990. The latter provision subsequently gave rise, in 1994, to a constitutional amendment that mandates the State, in Art. 20 A of the German constitution, the *Basic Law* of 1949, to protect the environment as an element, among others, of its responsibility for future generations.⁶

Some authors consider the ‘prevention principle’ – as opposed to and in addition to the precautionary principle - a specific environmental law principle as well,⁷ although its roots go back to 19th-century German administrative law doctrines of ‘Gefahrenabwehr’ – of ‘public order and security’ and how to preserve them. The distinction between ‘prevention’ on the one hand and ‘precaution’ on the other is indeed a crucial one in German environmental law and it has also proven highly germane jurisprudentially to the decisions of the German (administrative) courts. Consequently, the better view would appear to be to consider the prevention principle a fully-fledged environmental law principle in its own right.

2 The Precautionary Principle

2.1 Distinguishing between prevention and precaution

In doctrine and jurisprudence, the distinction between ‘Gefahrenabwehr’ on the one hand and ‘Vorsorge’ on the other is of far-reaching consequences. One could translate the concept of ‘Gefahrenabwehr’ with ‘prevention’ and ‘Vorsorge’ with ‘precaution’ although the concepts are not one hundred percent identical in their respective English language version. Literally translated, ‘Gefahrenabwehr’ means ‘warding off dangers’ – fending off

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¹ See E. Rehbinder, *Politische und rechtliche Probleme des Verursacherprinzips* (Berlin, E. Schmidt), 1973.

² Gesetz zum Schutz vor schädlichen Umwelteinwirkungen durch Luftverunreinigungen, Geräusche, Erschütterungen und ähnliche Vorgänge (Bundes-Immissionsschutzgesetz – BImSchG) In der Fassung der Bekanntmachung vom 14. Mai 1990 (BGBl. I S. 880, zuletzt geändert durch G v. 17.3. 1998, BGBl. I S. 502).

³ Environmental principles made their first official appearance in the German Federal Government’s Environmental Programme of 1971, BT-Drs. VII/2710 (= Papers of the Sixth Bundestag no. 2710), see also M. Kloepfer, *Umweltrecht*, 2nd ed. 1998 at 163.

⁴ While Kloepfer mentions a triad of principles in his textbook on environmental law (supra note 2), Bender/Sparwasser/Engel identify no less than eight main principles of environmental law, see Bender et al., *Umweltrecht*, 3d ed. 1995 at 24ff. For the proposal to codify the precautionary, polluter-pays, and the cooperation principle see Kloepfer/Rehbinder/Schmidt-Assmann/Kunig, *Umweltgesetzbuch, Allgemeiner Teil, Berichte [reports] 7/90 of the Umweltbundesamt (Federal Environmental Agency) Berlin 1990 at 40 and 138.*

⁵ Vertrag zwischen der Bundesrepublik Deutschland und der Deutschen Demokratischen Republik über die Herstellung der Einheit Deutschlands – Einigungsvertrag – Vom 31. August 1990 (BGBl. II p. 889 [Federal Statutes of Germany, part II], geändert durch Vereinbarung v.18.9.1990, BGBl. II p. 1239).

⁶ The constitutional mandate to protect the environment reads as follows: „The State, bearing responsibility for future generations as well, protects the natural bases of life within the existing constitutional order through legislation and, pursuant to statute law and justice, through its executive power and the judiciary.“ The precautionary principle and the prevention principle are regarded as coming within the purview of this provision, see Murswiek, Art. 20a, in: Sachs (ed.), *Grundgesetz, 1996*; Scholz, Art. 20a, in: Maunz/Dürig, *Grundgesetzkommentar (loose-leaf)*, Octobre 1996, para. 11.

⁷ R. Fleury, *Das Vorsorgeprinzip im Umweltrecht*, 1995, p. 5; Bender/Sparwasser/Engel, p. 25.

threats to public order and security. In accordance with the definition of 'a danger [threat] to public order' already given by the Prussian Administrative Court in 1882,⁸ that is still the position today: the authorities have to make use of their police powers and take preventive measures if legally protected interests of private persons - such as freedom or property - or 'public order and security' have been, or are about to be, infringed and are, in this sense, literally 'in danger'. The infraction must be imminent, with the degree of probability justifying preventive measures in the concrete case depending on the magnitude of the feared infraction: The more serious the threat to public order is, depending on the status and importance of the legally-protected interest or good at stake and the extent to which it is being threatened with an infraction, the less probable the actual occurrence of an infraction has to be and *vice versa*.

This traditional rule of public order legislation first entered nuclear energy law and then spread to other areas of environmental law as well.⁹ The concept of 'prevention' (Gefahrenabwehr) in this sense, however, is, for obvious reasons, practicable only in cases of identifiable risks. In other situations, a prognosis as to the exact probability of an infraction, or whether one will occur at all, is not possible. In the case of so-called unidentifiable risks, that is risks for which the empirical sciences have not (yet) been able to establish definitively cause-effect relationships, any dose-response-calculation must remain insecure and, hence, moves beyond the realm of prevention.¹⁰ In a like manner, where the identifiable potential risk is very high (because of the magnitude of so-called 'possible detrimental effects' or, again, the importance of the legally-protected interests involved), it may be necessary to take preventive measures even though the probability of an accident actually occurring is very low (as with nuclear power plants for instance). The precautionary principle applies to all these cases and thus

fills the gap in the prevention principle. In this sense, it is complementary to the prevention principle.

Before examining more closely the concepts of prevention and precaution in federal ambient air quality protection legislation and related areas of the law, it should be pointed out that there is a constitutional dimension to prevention and precaution as well. Both the Federal Constitutional Court and the administrative courts have held that the legislature is under a constitutional obligation to afford the citizens of the Federal Republic with adequate procedural protection against the risks associated with the use of potentially very hazardous technologies such as nuclear energy or genetic engineering and bio-technology.¹¹ The Federal Constitutional Court derived this obligation from a reading of Art. 2 of the *Basic Law* that views this provision's guarantee of 'life and bodily integrity' not only as a negative freedom to protect against straightforward State intrusion or denial but also as a positive duty to provide for at least minimal protection against the potentially devastating effects on the right to life and security of the person flowing from the use of hazardous technologies in industrial production processes or other activities undertaken by private third parties.¹²

While the State is thus under a constitutional obligation to ensure that nuclear installations or biotech plants do not operate without prior authorization, the right to life and physical integrity does not require the authorities, or Parliament, to prescribe a no-risk precautionary standard with respect to certain technologies that would actually preclude their use and application.¹³ Where the licensing of potentially hazardous installations under statutory provisions that incorporate the precautionary principle does not lead to a zero-risk situation and certain risks remain, the latter are deemed to be 'socially adequate' and have to be borne as such collectively by the entire citizenry of the Federal Republic.¹⁴ Nor does the constitutional duty to provide for a measure of statutory precaution against certain risks that can take on catastrophic proportions entail a requirement to prescribe concrete threshold values for the emission of toxic or radio-active substances.¹⁵ Parliament must be left some latitude in

⁸ PrOVGE 77, 333; see also PrOVGE 77, 341 and 95, 141 [= Entscheidungen des Preussischen Oberverwaltungsgerichts=Prussian Administrative Court of Appeal Reports, vol. 77 at 333].

⁹ R. Steinberg/G. Roller, Atomrechtliche Schadensvorsorge und "Restriktiko", in: Schneider/Steinberg, Schadensvorsorge im Atomrecht zwischen Genehmigung, Bestandsschutz und staatlicher Aufsicht, Baden-Baden 1991, p. 14ff. See also most recently the *Federal Soil Protection Act* which differentiates between a statutory requirement to *prevent dangers*, pursuant to s. 4 (2), by fending off hazards arising from detrimental soil alterations and a requirement to take due *precaution* against such detrimental soil alterations.

¹⁰ See also N. de Sadeleer, Les principes comme instruments d'une plus grande cohérence et d'une effectivité accrue du droit de l'environnement, in: F. Ost/S. Gutwirth, quel avenir pour le droit de l'environnement? Bruxelles 1996, p. 247; N. de Sadeleer, Les principes du pollueur-payeur, de prévention et de précaution, Bruxelles 1999, p. 167 ff.; B. Gill/J. Bizer/G. Roller, Riskante Forschung, 1998, p. 18, 76ff.; S. Deimann, Groth Hormones - Take Two, elni-Newsletter 1/98, p. 43 (at 47).

¹¹ BVerfGE 49, 89 - Kalkar I [-Federal Constitutional Court Reports vol 49 at 89], 53, 30 - Mülheim-Kärlich - ; 77, 170 - Fischbach -, Hess.VGH DVBl. 1990, S. 63 ff; NJW 1990, p. 336 ff.

¹² BVerfGE 39, 88, 203.

¹³ BVerfGE 49, 89; see also 53, 30 - Mülheim-Kärlich.

¹⁴ BVerfGE 49, 89.

¹⁵ BVerwG, ZUR 1999, p. 112: as the Federal Administrative Court makes clear, however, Parliament and the executive retain unfettered discretion to prescribe minimization or ALARA standards. For limits as to what Par-

the fulfilment of its constitutional duty to afford protection.¹⁶

2.2 Prevention and Precaution under the Federal Emissions Control Act (federal ambient air quality control legislation)

2.2.1 The legal concept and its implementation by regulations and administrative guidelines

Section 5 of the *FECA* lays down mandatory conditions a plant operator has to comply with in order to be granted an operating licence.¹⁷ The section provides, *inter alia*, that an installation which is subject to licensing shall be built and operated in such a way that

- no detrimental environmental effects or other hazards (technically 'dangers' in the above-mentioned sense), noticeable adverse effects and nuisance to the public and the neighbourhood are caused (prevention principle – head 1), and
- precaution is taken to prevent detrimental environmental effects, in particular through emission control measures corresponding to state of the art technology (precautionary principle – head 2).

These principles are complemented by 25 regulations as well as a number of qualified administrative guidelines that are intended to provide an authoritative interpretation of general clauses and terms (such as 'state of the art technology'). One of the most important pieces of such subordinate legislation is the *Technical Instruction Air*. In its present form, the *TI Air* was adopted in 1986. It applies to all industrial installations requiring prior authorisation under the provisions of the *Fourth Regulation to Implement the Federal Emission Control Act* irrespective of whether the administrative procedure concerns the granting of an initial permit, the authorisation of subsequent modifications to the installation, or control measures as part of an enforcement programme run by the authorities.

Ambient air quality control and protection in Germany follows a double approach: The *TI Air* provides for both emission control standards and ambient air quality standards that have to be respected as well. Where the authorisation of a new plant or an

already existing ambient air condition leads to ambient air quality threshold values being exceeded, no further authorisations can be issued. In addition, special provisions exist for specific categories of plants which modify the overall standards both by relaxing and tightening them.

In their jurisprudence, the courts have, without exception, construed ambient air quality standards ('Immissionswerte') as interpreting s. 5 (1) (1) of the act, hence the prevention principle while emission control standards, on the other hand, have been interpreted as rules emanating from s 5 (1) (2) of the act. This difference in interpretation - attributing ambient air quality to prevention while viewing emission control as an element of precaution - has had far-reaching consequences in practice.

2.2.2 The jurisprudence concerning the precautionary principle and locus standi

The legal status of the precautionary principle, as laid down in section 5 (1) (2) of the *FECA*, first became the subject of court decisions in the 1970s. The focus of the rulings was first of all on the question of whether plaintiffs had standing to sue when alleging a violation of the precautionary principle. To understand the background to this problem, we have to examine somewhat more closely the legal concept of standing in German administrative law.

S. 42 (2) of the *Administrative Courts Procedure Act (Administrative Judiciary Statute)* provides:

*"Unless otherwise determined by law the suit is admissible only if the plaintiff claims to be violated in his rights by the administrative act or its denial or omission".*¹⁸

The courts have interpreted this provision in a rather restrictive manner: "his rights" means that the plaintiff, first of all, has to be individually affected by an administrative order or action as a matter of fact and, secondly, that he can show to be affected in his individual rights as a matter of law. That is the case only if the plaintiff can allege a violation of such provisions that are expressly or impliedly intended to confer legal protection on his individual interests and that are not deemed to have been enacted in the furtherance of an objective that is solely in the public interest.¹⁹ The objective of such a narrow interpretation of the law is, of course, to preclude any kind of public interest litigation or

liament may require plant operators to do in the pursuit of precautionary standards see below under III B.

¹⁶ BVerfG NuR 1997, 394/395; 56, 54/81; 77, 381/405; 79, 174/202; 85, 191/212f. 92, 26/46.

¹⁷ See on this: J. Jahns-Böhm, From Combating Air Pollution to an Integrated Pollution Prevention, in: Gebers/Robesin, Licensing Procedures for Industrial Plants and the Influence of EC-Directives, elni Studies no. 3, Frankfurt a.M. 1993, p. 81ff.

¹⁸ Translation taken by Th. Ormond, Environmental Group Actions in West Germany, in: Führ/Roller, Participation and Litigation Rights of Environmental Associations in Europe, elni Studies no. 1 Frankfurt a.M. 1991, p. 81.

¹⁹ See on this: Th. Ormond (op cited) p. 81ff.; R. Steinberg, Judicial Review of Environmentally-related Administrative Decision-making, Tel Aviv University Studies in Law, Vol. II, 1992, p. 61ff.

class action that would go beyond alleging a violation of individual rights and interests.²⁰

Oddly enough, it lies in the nature of this doctrine that the plant operator invariably has standing when appealing decisions by the authorities that are meant to implement and enforce the precautionary principle. He has standing to claim, and complain, that conditions set in a licence are too strict because the licensing requirement affects his individual private interests flowing from his proprietary interests in the plant.

It is not at all the same, however, if the plaintiff is a neighbour alleging a violation of the precautionary principle, e.g. an excess of SO₂ emission standards. In this case, the plaintiff has to show that his action is based on a "protective norm" that, expressly or impliedly, seeks to protect his individual rights. In doctrine and jurisprudence, the prevention principle (Gefahrenabwehr) and rules to implement it are doubtless viewed as conferring such individual rights. Thus, s. 5 (1) (1) of the *Federal Emissions Control Act* and all subordinate legislation interpreting this head have been held to confer individual rights and, consequently, *locus standi*. Hence, a violation of ambient air quality standards can be actionable before the administrative courts.

In the 1970s, some courts at first held that standing to sue the authorities in the administrative courts could also be derived from alleging a violation of the precautionary principle. It is indeed difficult to understand why emission reduction and control measures should not be viewed as measures apt to protect the neighborhood too and only be regarded as measures for the exclusive benefit of the general public. Notwithstanding these considerations, the Federal Administrative Court reversed decisions in the lower courts granting standing to sue under the precautionary principle and held that, irrespective of the function and the scope of the principle in detail, under no circumstances could it give rise to individual rights.²¹ The Federal Administrative Court thus shut the (courtroom) door to a more "neighbour- and environmentally friendly" interpretation of the law. As a consequence, the courts now refuse to grant standing if the statement of claim is

based on a violation of emission limit values which are regarded as emanations of the precautionary principle under the *Federal Emission Control Act*. An exception is made for violations of standards that concern cancerogenic or highly toxic substances. In these cases, the standards are deemed to be emanations of the prevention principle because of the high level of risk inherent to use and emission of these substances.²²

2.2.3 Precaution and Proportionality

Finally, while the administrative courts' interpretation of the precautionary principle has thus led to a double standard with respect to standing for operators and concerned third parties, it should be pointed out that on the merits the precautionary principle has been held to be sufficient justification for enforcement orders or regulations seeking to reduce emissions from industrial installations. While precautionary measures to reduce emission loads need to be proportionate to the risks they are intended to address, a programme that seeks to reduce emission loads across the board and is tailored to provide for uniform and regular implementation has been upheld as complying with this requirement of 'global' or overall proportionality.²³ In these cases, a complaint by an individual plant operator that the measure imposes an undue economic burden will fail and leave the overall scheme and any finding as to its proportionality unscathed.

Moreover, on the basis of the *Technical Instructions*, the authorities may legitimately prescribe emission reductions irrespective of whether a particular ambient air quality situation within an installation's impact area can be attributed or, indeed, causally traced to emissions from that installation.²⁴ According to the Federal Administrative Court, it is precisely the nature of the problem that precautionary air emission control seeks to address, namely the impossibility – as a rule – of attributing a particular ambient air quality situation to emissions from a particular plant, that renders emission reduc-

²⁰ For the narrow conception of association lawsuits in Germany see the comprehensive overview by Th. Ormond, *supra* note 12 which in its overall conclusions and analysis still holds true, although more German Länder have adopted legislation conferring standing to sue on registered nature conservation unions and associations; see also for a more recent analysis by the same author: 'Access to Justice' for Environmental NGOs in the European Union, in: S. Deimann/B. Dyssli (eds.), *Environmental Rights*, London 1995 at 71; see also Führ/Gebers/Ormond/Roller, 'Access to Justice': Legal Standing for Environmental Associations in the European Union, in: Robinson/Dunkley (eds.), *Public Interest Perspectives in Environmental Law*, 1995 at 71ff.

²¹ See BVerwGE 69, 37 – Heidelberger Heizkraftwerk = NVwZ 1983, 34.

²² VGH (Verwaltungsgerichtshof) Mannheim, *Neue Zeitschrift für Verwaltungsrecht - Rechtsprechungsreport* 1995, 639 (at 644).

²³ BVerwGE 69, 37 – Heidelberger Heizkraftwerk. See also S. Rose-Ackermann, *Controlling Environmental Policy*, Yale University Presse 1995, p.77.

²⁴ BVerwG UPR 1995, p. 196/197; as the Federal Administrative Court made clear in this ruling, precaution is not limited to combating risks arising from gaps in scientific knowledge and the resultant impossibility of proving empirically certain causal links that scientific hypotheses suggest may nevertheless exist. Precaution can go much further than this. "Precaution, understood as proactive environmental protection, aims beyond concrete detrimental threshold levels and, hence, justifies prevention efforts vis-à-vis detrimental air pollutants that are taken with a view to achieving, or preserving, on a longer-term basis air quality standards which are sufficiently removed from any situation suggesting the concrete presence of adverse environmental effects or justifying an apprehension as to their development."

tions across the board using a longer-term time frame regardless of current uses of a facility necessary.²⁵ Limitations as to what the authorities may legitimately prescribe in terms of emission reductions may arise, however, where reduction aims go beyond general emission limit-values set forth in Technical Instructions. Emission reduction targets flowing from the application of a minimisation or ALARA policy in atypical situations must be assessed individually as to their proportionality. Here the authorities have to take into account compliance costs for individual operators (as opposed to overall compliance costs for industry in general) when assessing the proportionality of individual emission reduction targets.²⁶

2.3 Nuclear Energy and Genetic Engineering Law

In nuclear energy law, this sophisticated - and really somewhat arbitrary - dichotomy into preventive and precautionary standards does not exist. In an important decision concerning the nuclear power plant near "Wyhl" in the Black Forest,²⁷ the Federal Administrative Court held that the relevant provision in the *Nuclear Energy Act*, stipulating the conditions under which a plant could be authorised (s. 7 (2) (3) of the Act), should be construed so as to allow for the incorporation of a large measure of precaution. The responsible authorities have to consider not only hazards that might arise with a certain probability, but also those risks for which, as yet, no cause-effect relationships have been empirically shown to exist or the uncertainty of which does not even allow for the formulation of reliable prognoses; it is sufficient that there be scientific assumptions indicating a certain 'apprehensive potential' in order to establish the duty to take preventive measures.²⁸ Thus, 'unidentifiable' or 'hypothetical' risks achieve a measure of legal significance; they have to be considered and taken into account in licensing procedures and enforcement action under the *Nuclear Energy Act*. Unlike under the *Federal Emission Control Act*, an individual can assert under the *Nuclear Energy Act* that the au-

thorities have not taken all measures necessary to ensure best possible prevention *and* precaution.²⁹

Subsequently, the administrative courts applied this line of reasoning to genetic engineering legislation as well. Citing the *Wyhl*-case, the Administrative Court of Hamburg argued in exactly the same terms as the Federal Administrative Court that section 13 of the *Genetic Engineering Act* incorporated precautionary standards and thus conferred standing to sue for purposes of appealing a permit for a genetic engineering plant that has been granted to a third party.³⁰ The same holds true in cases concerning authorisations for the voluntary dissemination of genetically modified crops.

Yet, judicial scrutiny of the competent authorities' decisions is restricted in both areas of the law. In keeping with the Federal Administrative Court's reasoning in *Wyhl*, the administrative courts will exercise their jurisdiction only to control the procedural aspects of risk-assessment and risk-evaluation. In other words, the courts will not decide precisely what measures are necessary to comply with the precautionary principle but only whether the competent authorities took into account all relevant aspects (such as scientific studies) and thus came to a reasonable conclusion. One might say the authorities are granted a sort of discretionary power - or margin of appreciation - concerning risk-assessment. Consequently, in these cases there is no full judicial scrutiny as to compliance with the precautionary principle in the matter.

3 The cooperation principle in the recent jurisprudence of the Constitutional Court

While jurisprudence concerning the precautionary principle has been in ample existence for some time, the cooperation principle, until recently, rarely had the honour of becoming the dominant subject of a court decision. Two recent cases have drastically altered this situation.

²⁵ Ibid.

²⁶ BVerwG ZUR 1997, p. 158 ff.

²⁷ BVerwGE 72, 300.

²⁸ BVerwGE 72, 300/315. The court nevertheless differentiates between risks facing individuals and those borne by the public at large. In other words, within the purview of the precautionary principle a further threshold exists below which precautionary protection is deemed to be sufficient even though the authorities could theoretically impose more stringent security requirements on plant operators for reasons of further risk-minimization. For a critical assessment of this distinction which, in the final analysis is not convincing see Steinberg/Roller, *Atomrechtliche Schadensvorsorge und 'Restrisiko'*, in: Schneider/Steinberg, *Schadensvorsorge im Atomrecht zwischen Genehmigung, Bestandsschutz und staatlicher Aufsicht*, Baden-Baden 1991 at 14ff.

²⁹ Traditionally, however, the Federal Administrative Court has refused to grant standing to individual plaintiffs alleging the 30mrem threshold limit-value under s. 45 (1) of the *Ionising Radiation Protection Regulation* afforded them insufficient protection against the health hazards attaching to the operation of nuclear power plants, BVerwGE 61, 256/261. More recently, this jurisprudence has been liberalised where plaintiffs can demonstrate that in spite of compliance with the 30mrem-concept (i.e. an ambient limit-value of 30mrem) a statistically significant higher rate of child-leukemia obtained in the vicinity of a particular nuclear power plant. Citing the constitutional duty to provide positive protection for the right to life and bodily integrity under Art. 2 (2) of the Basic Law, the Federal Administrative Court held that an action, alleging insufficient protection under the 30mrem concept in the light of new scientific evidence and, hence, insufficient implementation of the requirement to take due precaution against hazards arising from the operation of a nuclear energy facility, was admissible, see BVerwG ZUR 1997, S. 161 ff - Krümmel Nuclear Power Plant/child leukemia in the Elbe marshes -.

³⁰ VG Hamburg, ZUR 1994, p. 322ff.

Originally, the co-operation principle was premised upon the idea that environmental protection should not be the exclusive responsibility of the State but, instead, be incumbent upon society as a whole. All relevant actors should be involved in environmental protection. In this sense, the co-operation principle expresses an idea that the Fifth Environmental Action Programme of the EC has taken up under the label of "Shared Responsibility". In the German discussion, the co-operation principle has sometimes been misunderstood as only a bipartite relationship between Government and industry. But the public plays an important role as well. Co-operation and participation are thus two sides of the same coin.

The cases I would like to refer to both dealt with economic instruments in environmental regulation. One case concerned a local tax on one-way packaging, the other a provincial state (Länder) tax on dangerous industrial wastes. Both the municipal ordinance and the provincial state statute levying these taxes were declared unconstitutional and hence null and void by the Federal Constitutional Court. The astonishing point of the matter is not so much the outcome in these two cases as the reasoning employed by the Court. In both cases, the Court held that the co-operation principle had been violated because both the local council and the State legislature had established a regime of economic incentives and punishments that were held to be at variance with relevant federal legislation – the *Federal Waste Act* in the former case and the *Federal Emission Control Act* in the latter case. None of the constitutional questions of legislative jurisdiction, the definition of what constitutes a tax or other hurdles proved to be problematic. Only the purported failure to comply with a rather vague principle and what the Court believed it to mean stood in the way of the levies' constitutionality. Curiously enough, none of the federal statutes at issue so much as even mention the principle. But because we have now advanced to the realm of high-minded principles, small-minded arguments such as this could, of course, not stand in the way of the learned justices developing a completely new vision of environmental law that turns upside down the objectives and conception of the law.

In the first case,³¹ the court developed a view of waste legislation in Germany that is based on the co-operation principle as far as packaging waste is concerned. The fact that the legislature had prac-

tised restraint in order to promote voluntary schemes for preventing the generation of packaging waste was, in the Court's view, telling proof of a 'co-operative' approach. For reasons that remain the Constitutional Court's secret, even the *Packaging Waste Regulation*³² (that forces industry either to take packaging waste back on the spot in supermarkets or to put up a private collection system) mutates, on this reading, into an instrument of "co-operation". But even if we were to share this point of view, it is difficult to see why and how a local tax on one-way packaging could impinge on this "co-operative" concept. The Federal Constitutional Court's principal argument is that the tax was intended to promote and reward a certain kind of behaviour, namely restraint on the part of the consumer with respect to buying goods using one-way packaging. This, according to the Court, conflicts with the underlying principles of the law which only stipulates objectives but leaves the means to attain them to the 'co-operating' partners. This reasoning ignores that both instruments have the same objective - waste prevention - and that they complement rather than impinge on one another.

In the second case,³³ the Federal Constitutional Court argued that section 5, subsection (1), head 3 of the *Federal Emission Control Act*, which creates a statutory duty for the plant operator to prevent the generation of waste or provide for its safe disposal, sets forth a concept of co-operation; according to the Court, the foundations for this concept are to be found not only in provisions concerning participation rights and duties of the plant operator in the licensing procedure but also – and most astonishingly – in the instrument of subsequent enforcement orders which the Court views as pieces of an overall puzzle called 'co-operation'. In the Court's (wrong) view, the *Federal Emission Control Act* pursues a concept of "open choices" for the plant operator when dealing with waste materials generated by his plant; a tax on dangerous wastes would come into conflict with this concept.

The two decisions serve to demonstrate the growing weight of environmental law principles in German environmental law. But they also serve as a reminder of the interpretative pitfalls that lie ahead when deliberating on abstract principles that have been artificially severed from the specific legislative context in which they were first adopted. Ultimately, this could not only weaken the effectiveness of environmental law but also the democratic principle.

³¹ BVerfG (= Bundesverfassungsgericht = Federal Constitutional Court), judgment of 7 May 1998, repr. in *Umwelt- und Planungsrecht (UPR)* 1998, p. 261. The facts of this case and the preceding ruling by the Federal Administrative Court are discussed in S. Deimann, *The Federal Administrative Court Upholds the Right of German Cities to Tax One-Way Non-Reusable Packaging*, elni-Newsletter 2/1995, p. 31.

³² *Verpackungsverordnung*.

³³ BVerfG, *Umwelt- und Planungsrecht* 1998, p. 265. For a critical analysis of this decision see M. Führ, *Widerspruchsfreies Recht im uniformen Bundesstaat? Kritische Justiz* 4/1998, p. 503.

CURRENT AFFAIRS

Investing in the Environment - A Green Agenda for the Millenium Round

Sven Deimann

Despite the recent failure of the WTO' 3rd Ministerial Confrence in Seattle, talks on initiating a Millenium Round focussing on further trade and investment liberalization will likely continue in Geneva at the seat of the WTO¹. In tackling the issue of investment protection, the WTO will likely pick up the pieces and start again where the OECD failed. By August 1999, a substantial number of permanent WTO missions had submitted communications to the General Council in preparation of the Ministerial Meeting in Seattle that make it quite clear that international rules for investment protection and a further liberalization of capital movements will be on the agenda. Crucially, the government of France whose withdrawal from the OECD negotiations for an MAI² had sounded the death knell for the OECD sponsored-convention project no longer appears to be completely opposed to international rules for investment within the WTO's framework, either.³

This article proposes to survey some of the issues that international rules on investment raise for environmental protection. In doing so, the underlying growth-philosophy of neo-classical economic theory that continues to serve as the theoretical underpinning for much of the push for further liberalization and deregulation of the world economic order will be critically examined. Deregulation at the national or supra-national level occurs through imposing trade disciplines on regulators.

Further economic growth through liberalizing trade and investment as a prerequisite to environmental protection?

In a recent policy paper that was probably released in an attempt to salvage the floundering project of a Multilateral Agreement on Investments, the OECD once again extolled the virtues of trade and investment liberalization and sought to assuage fears of an environmental roll-back as a result of additional disciplines on regulators:⁴

"[...], this lends support to the view that openness to foreign competition is more likely to raise than lower environmental standards.

There is, indeed, scant evidence to support the view that high environmental standards exert strongly negative effects on competitiveness. Fears of a massive re-deployment of production towards low-standard countries are greatly overstated. In fact, experience shows that openness to trade and investment generally translates into increased pressure for more stringent environmental standards."

The paper concludes with the following evaluation of the effects of trade and investment liberalization:

*"Done properly, liberal trade and investment are, and must be seen as being, not only about greater freedom of choice but also about fairness. Fairness in ensuring that the general interest - concern for the welfare of all citizens - prevails over special interests; and in seeing to it that the dividends of liberalization are distributed more equitably, both within and between countries."*⁵

The OECD's upbeat assessment of trade and investment liberalization must be seen, of course, against the backdrop of an underlying economic

¹ "OMC: la conférence de Seattle a échoué", Le Monde of 5/6 December 1999, p.1.

² Multilateral Agreement on Investments

³ At least if the second report by French MEP Catherine Lalumière is to be an indication. Her earlier report on the MAI negotiations triggered the Jospin government's decision to withdraw from the MAI negotiations, thereby bringing them to an end. The new report stresses the limits to rule-making on a number of subjects, including environmental and consumer health standards, within the WTO context but does not seem to be totally opposed to such rules either. See Cath. Lalumière/J.-P. Landau/E. Glimet & Olivier Bajaluna, *Rapport sur les négociations commerciales multilatérales* (ATTAC: Paris, available at <http://attac.org>).

⁴ © OECD. Reproduced by permission of the OECD.

⁵ OECD, *Open Markets: The Benefits of Trade and Investment Liberalization* (OECD: Paris, Policy Brief 6-98) (emphasis added).

theory which views economic growth not so much as one of the potential causes of environmental degradation and resource depletion but rather as a fundamental prerequisite to improving environmental quality.⁶ As proof, economists frequently point to statistical evidence that suggests voter-consumer⁷ demand for environmental quality rises as a country passes the threshold of \$ 5,000 annual GDP per capita.⁸ In its more radical version, this analysis - which is premised upon an economic reading of both environmental policy and federal decision-making structures - can take a bizarre and surprising twist:

"Assume there is no national environmental regulation, and all environmental issues are the prerogative of the state and local governments. Firm 'X' operates in New Jersey. As the incomes of those who live in New Jersey increase as a result of industrial growth provided by X, the citizens of New Jersey will place a higher emphasis on environmental quality. State and local government decisionmakers will respond to citizens' demands for better pollution control. Assume that X responds to the increase of pollution standards in New Jersey by moving to Missouri, where pollution control is not as stringent. Missouri's environmental laws could reflect Missourians' preferences given their low relative incomes. Many people in Missouri welcome X's operations even at the expense of environmental problems. As X's industrial production causes Missouri's economy to expand, the incomes of individuals will increase and so will their demand for a cleaner environment. The initial harmful levels of pollution may be a nec-

*essary first step toward increasing citizen's demands for a cleaner environment."*⁹

Not surprisingly, this scenario calls for criticism on a number of grounds.

For a start, contrary to what the OECD and some economists would have us believe, there is no empirical evidence to support the view that economic growth *invariably* leads to a cleaner and safer environment simply because economic growth and its presumed concomitant of higher incomes would generate higher voter-consumer preference for environmental quality. Whether economic growth benefits the environment or not, remains - as one author writes - largely "a matter of belief".¹⁰

Moreover, as Neumayer's analysis also demonstrates, viewing environmental protection and voter-consumer demand for a certain level of environmental quality merely as a function of income and wealth can put a normative spin on what originally claimed to be no more than a description of empirically observable facts: it is not only that poorer developing countries show, as a matter of empirically observable facts, a markedly lower preference for environmental quality but rather that they *should not* express such a preference in the first place, as environmental quality is deemed to be a luxury good suitable only for wealthy industrialized countries.¹¹

Furthermore, while there is indeed empirical evidence to suggest that high environmental standards constitute at best a marginal factor in industrial siting and relocating decisions,¹² the *perceived* implications of environmental regulation for a location's competitiveness would appear to have been sufficient in recent years to trigger a race-to-the-bottom among a number of industrialized countries.¹³ Decision-makers are locked in a prisoner's

⁶ The EC submission to the WTO General Council in preparation of the Seattle Ministerial Meeting - *EC Approach to Trade and Environment in the New WTO Round*, WT/GC/W/194 of 1 June 1999 at www.wto.org - reflects this view as much as many provisions in the *Rio Declaration* that seem to predicate environmental protection on economic growth and development.

⁷ The new political economy, following the teachings of neo-classical economic theory, sees voters in much the same way as consumers, *i.e.* as utility-maximizing individuals whose choices express measurable preferences. On this reading, political choices expressed by voters are qualitatively no different from consumer choices. That this conflates distinct and separate categories has been pointed out by critics of economic analysis in legal theory, see only J. B. Burton & J. Dunoff, "Against Market Rationality: Moral Critiques of Economic Analysis in Legal Theory" (1996) 17 *Cardozo L. Rev.* 431.

⁸ See, for instance, M. Pflüger, "Globalisierung und Nachhaltigkeit" [1999] *ZfU* 135-154. This author provides a particularly rose-tinted view of the effects of trade liberalization and consequential economic growth on the environment. Citing a 1992 US study, Pflüger argues that by and large the current global economic order - marked by economic growth as a result of trade liberalization and the integration of markets on a global scale - meets the standards of sustainability. The continuing destruction of rain forests and decline in species diversity, in particular in resource-based economies and the emerging markets of, for instance, Brazil or Indonesia, have simply dropped from the picture.

⁹ H.N. Butler & J.R. Macey, "Externalities and the Matching Principle: The Case for Reallocating Environmental Regulatory Authority" (1996) 13 *Yale J. of Reg* 23 at 44 (emphasis added).

¹⁰ E. Neumayer, "Is Economic Growth the Environment's Best Friend?" [1998] *ZfU* 161.

¹¹ *Ibid.* at 171 citing G.M. Grossman as quoted in D. Ferguson *et al.*, *Dangerous Curves: Does the Environment Improve with Economic Growth?* (New Economics Foundation for WWF International: Gland, WWF) at 6: "[...] attention to environmental issues is a luxury good that poor countries cannot afford."

¹² See J.A. Tobey, "The Effects of Domestic Environmental Policies on Patterns of World Trade: An Empirical Analysis" (1990) 43 *Kyklos* 191; M.L. Cropper & W.E. Oates, "Environmental Economics: A Survey" (1995) 33 *J. of Economic Lit.* 675; A.B. Jaffe *et al.*, "Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?" (1995) 33 *J. of Economic Lit.* 132; J. Adams, "Environmental Policy and Competitiveness in a Globalised Economy," in: OECD (ed.), *Globalisation and Environment. Preliminary Perspectives* (OECD: Paris, 1997) 53 [hereinafter *Globalisation and Environment*]; S. Facheux *et al.*, "Economic Globalisation, Competitiveness, and Environment," in: *Globalisation and Environment*, 101.

¹³ M. E. Kulessa & J. A. Schwaab, "Liberalisierung grenzüberschreitender Investitionen und Umweltschutz" [1998] *ZfU* 33 at 45; D. C. Esty & B.S.

dilemma that prevents them from adopting and enforcing appropriate regulatory programmes in response to market failures.¹⁴ Faced with stiffening competition when trying to attract investment, numerous jurisdictions among Western industrialized countries have embarked upon a massive de-regulation campaign that has included environmental protection programmes and has resulted in significantly lower statutory or enforcement standards. In fact, legislative responses in Germany, for instance, to growing competitive pressures on industrial siting and job creation in the 1990s prompted the former President of the German Federal Environmental Agency, Heinrich von Lersner, to speak of "an ecological counter-reformation".¹⁵ How, in the light of these developments, the OECD, in 1998, can continue to claim, without qualification or reservation, that liberalized trade and investment, far from undermining high environmental standards, actually enhance environmental regulation, remains the secret of this organization's policy advisors and economic theorists. It is, at any rate, a claim that bears absolutely no relation to real-world environmental policy and law.¹⁶

Finally, as Neumayer also rightly emphasizes, the 'pollution as a first step to a cleaner environment'-scenario pays insufficient regard to higher costs of *ex post* environmental restoration (as opposed to pollution prevention) and the possibility of threshold (carrying) levels being exceeded, leading to irreparable damage to some environmental media and eco-systems.

None of this is to suggest that we should not strive to alleviate poverty and income disparities between rich and poor countries and that economic growth - facilitated by trade and investment liberalization - might not contribute to achieving some of these

aims.¹⁷ In addition, international rules on investment liberalization might actually help policy makers to end ruinous competition when trying to attract investments and, hence, free resources - e.g. for environmental protection or conservation measures - that would otherwise go into investment incentives.¹⁸ In this sense, international rules on investment could turn out to be the very tool for allowing policy makers to escape their 'prisoner's dilemma' and pave the way for solutions out of the race-to-the-bottom-scenario at the trade-and-environment-interface.

What is important to realize, however, is that it is too simple to equate economic growth with enhanced protection for the environment. There is no automatic causal nexus between growth and environmental protection. Whether economic growth will benefit the environment will continue to depend largely on the choices policy-makers make in shaping and guiding growth.¹⁹

Regulation for the benefit of the environment remains necessary and appropriate. Consequently, any multilateral agreement on investments that seeks to liberalize this sector of the economy much the same way as trade in goods and services has already been opened up needs to preserve policy-makers' capacity to enact and enforce regulatory programmes.

Lessons from NAFTA

The free trade agreement that contains the most comprehensive set of rules to date on investment is the *North American Free Trade Agreement*²⁰. Unfortunately, if *NAFTA* and experience with its provisions on investment are anything to go by, they do not provide an example of how multilateral rules can be used to allow policy-makers to escape the prisoner's dilemma. Rather, they provide a most discouraging example of how such rules can be (ab)used by (polluting) industries to extract rents and constrain policy-makers in their legitimate attempt to enact regulations in the public interest.

Gentry, Foreign Investment, Globalisation, and Environment, in: *Globalisation and Environment*, supra note 12, 101-139; see also P. M. Johnson & A. Beaulieu, *The Environment and NAFTA. Understanding and Implementing the New Continental Law* (Island Press: Wash. D.C., 1996) 45.

¹⁴ See Gro Harlem Brundtland, Commentary. Shifting Attitudes in a Changing World [1998] *Britannica Book of the Year* 6 at 8: "We find ourselves in a prisoner's dilemma." See also Kulesa & Schwab, supra note 13.

¹⁵ Cited in B. Bender/R. Sparwasser/R. Engel, *Umweltrecht. Grundzüge des öffentlichen Umweltschutzrechts*, 3d ed. (C.F. Müller: Heidelberg, 1995) 8, para. 19.

¹⁶ This would appear to be the case also for the OECD's further assertion that trade and investment liberalization - with their implicitly assumed concomitant of increased economic growth - allow for a more 'equitable' distribution of wealth among and within countries - an assertion that flies in the face of substantial statistical evidence to the contrary, namely that in spite of (or rather because of?) trade liberalization and the opening of markets income disparities between rich and poor, both within and among countries, have widened. As early as 1996, a World Bank paper had warned that the benefits of globalization had largely passed by the world's poorest countries, see "Seule une partie du tiers-monde profite de la mondialisation des échanges" *Le Monde* of 9 May 1996, p. 3 and more recently "La libération des échanges ne réduit pas 'la fracture mondiale'", *Le Monde Economie* of 23 November (Le round du Millenium), p.III.

¹⁷ Although once again, the assumed link between economic growth and rising incomes, hence falling poverty levels, is by no means automatic or certain. Some studies suggest that despite massive foreign direct investment in Mexico since the early 1970s, wage labour income as a share of manufacturing value added fell from 44 percent in 1970 to 22 percent in the late 1980s, see H. Shaiken, "The NAFTA, a Social Charter, and Economic Growth" in: R. S. Belous/J. Lemco (eds.), *NAFTA as a Model of Development: The Benefits and Costs of Merging High and Low-Wage Areas* (Albany: State University of New York Press, 1995) 27 at 28.

¹⁸ See, for instance, *Report of the Working Group on the Relationship Between Trade and Investment to the General Council*, WT/WGTI/2 (8 December 1998), (Geneva: World Trade Organization, 1998) para. 78-86 and 99.

¹⁹ Neumayer, supra note 10 at 171.

²⁰ *North American Free Trade Agreement between the Government of the United States of America, the Government of Canada and the Government of the United Mexican States*(1993) 32 I.L.M. 296 and 605.

That is not to say, though, that the drafters of *NAFTA* were insensitive to or unaware of the issues raised by integrating markets across jurisdictions with widely divergent environmental or labour standards.

Thus, *NAFTA* Art. 1114 (2) provides:

"The Parties recognize that it is inappropriate to encourage investment by relaxing domestic health, safety or environmental measures. Accordingly, a Party should not waive or otherwise derogate from, or offer to waive or otherwise derogate from, such measures as an encouragement for the establishment, acquisition, expansion or retention in its territory of an investment of an investor. If a Party considers that another Party has offered such an encouragement, it may request consultations with the other Party and the two Parties shall consult with a view to avoiding any such encouragement."

Unfortunately, while this provision makes it plain that the Parties were quite aware of the possibility of a race-to-the-bottom, they could not muster sufficient resolve to draw the necessary and appropriate policy conclusion in the face of such a possibility, notably to create a binding obligation for all the Parties *not* to engage in a race to the bottom and *not* to use environmental law and policy, including the participation rights of concerned citizens and public interest litigators, as a negotiating mass when trying to attract investments. The language of the provision, as it stands today, is merely hortatory, and, apart from consultations, does not give rise to any actionable rights should any of the Parties do engage in a lowering of standards so as to attract investments.²¹

Consequently, the quite similar proposals that were put forward by some delegations in the context of the OECD-sponsored MAI negotiations are subject to much the same criticism.²² What is required in the face of possible strategic behaviour on the part of investors and governments is a **binding and actionable** obligation not to use environmental policy as a tool for attracting investment by lowering or abolishing standards.

In a like manner, when it comes to shielding environmental measures against 'investment' challenges, *NAFTA* should not be used as a model (this

again contrary to suggestions made during the MAI negotiations). For the general exception clause in *NAFTA* - Art. 1114 (1) - reads as follows (emphasis added):

"Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns."

As is readily apparent, this clause - substantively - contains no exception at all. If a measure is "otherwise consistent with this Chapter", it does not require an exception to shield it against challenges - for the simple reason that - because it is consistent with *NAFTA*'s investment rules - it simply cannot violate substantive obligations under the Agreement in the first place. In this sense, then, the clause does no more than state the obvious, namely that the Parties continue to be at liberty to adopt measures that have not expressly or impliedly become subject to trade disciplines. In the event of a challenge to existing or proposed environmental regulation, such a clause will ultimately fail to provide even minimal protection and be, quite plainly, useless. To be effective and substantively exempt environmental measures from trade or investment disciplines, any additional clause on the environment will have to make do without the reservation of 'otherwise consistent'. Identical considerations apply where safeguard clauses purport to shield environmental or other regulatory measures from provisions - such as *NAFTA* Art. 1106 (3) - that seek to impose disciplines on so-called performance requirements.²³

That exemptions allowing for derogations only if measures are 'otherwise consistent' with the provisions of a trade agreement can be of limited force and effect has recently been demonstrated by the Appellate Body's ruling in *United States - Import Prohibition of Certain Shrimp and Shrimp Products*.²⁴ The Appellate Body placed considerable reliance on the similarly-worded reservation in the chapeau to Art. XX of the *GATT 1994*. Under the chapeau to Art. XX of the *GATT 1994*, the excep-

²³ Again, what comes cloaked in the language of an exception, on closer inspection, turns out to be no exception at all:

"Provided that such measures are not applied in an arbitrary or unjustifiable manner, or do not constitute a disguised restriction on international trade or investment, nothing in paragraph a (b) or (c) or 3 (a) or (b) shall be construed to prevent any Party from adopting or maintaining measures, including environmental measures: (a) necessary to secure compliance with laws and regulations that are **not inconsistent** with the provisions of this Agreement;

(b) ..."
(emphasis added).

²⁴ WT/DS58/AB/R of 12 October 1998.

²¹ See A. Beaulieu/P.-M. Johnson, *supra* note 12, at 128. Moreover, as these authors point out, while the environmental side agreement to *NAFTA*, the *North American Agreement on Environmental Cooperation* (1993) 32 I.L.M. 1480, provides NGOs with limited means to force the participating governments' hands when it comes to enforcing existing standards, no binding obligation is violated where a Party decides to relax, or simply abolish, standards (as opposed to merely not enforcing them).

²² See *The MAI Negotiating Text (as of 14 February 1998)* (OECD: Paris, 1998) 51 ('Proposed Additional Clause' on Labour and Environment).

tions in Art. XX (a)-(j) may only be invoked if measures

“are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.”

Although this language, on its face, appears to be merely repetitive of some of the substantive obligations under Arts. IXX, the Appellate Body has ascribed to the chapeau of Art. XX a separate and quite distinct normative content. The exception that Art. XX, on a plain reading of its paragraphs, appears to create is, according to the Appellate Body’s jurisprudence, a qualified one and does not lead to a Member being wholly exempt from the *GATT*’s various substantive trade disciplines. It is rather intended to strike a balance between the right to invoke an exception and the duty to fulfill substantive obligations otherwise created by the agreement:

*“In our view, the language of the chapeau makes clear that each of the exceptions in paragraphs (a) to (j) of Article XX is a limited and conditional exception from the substantive obligations contained in the other provisions of the GATT 1994, that is to say, the ultimate availability of the exception is subject to the compliance by the invoking Member with the requirements of the chapeau.”*²⁵

Clearly, this jurisprudence which seeks to limit the availability of exceptions that could be invoked to shield environmental and health measures against trade and investment challenges must be borne in mind when considering proposals for additional clauses reserving the right of Members to adopt and maintain appropriate environmental protection measures.

Moreover, as the *shrimp* case made clear - and contrary to what is at times asserted in OECD policy papers or analyses²⁶ -, measures adopted by WTO Members in order to implement Multilateral Environmental Agreements can indeed run afoul of WTO trade disciplines. While the *shrimp*-case concerned U.S. shrimp and sea turtle conservation measures that had not been wholly adopted for the purpose of implementing the *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*, they did concern species which are listed in Annex I to the Convention. Although perhaps not addressing ‘international trade’ in the sense of the Convention, the U.S. measures

almost certainly came within the ambit of the Convention’s reserve clause affirming the right of States party to *CITES* to adopt more stringent conservation measures. It is most surprising to see how, in the light of this constellation, the OECD can continue to claim, without any qualification, that “so far there have been no cases of conflict between the obligations with respect to trade provisions in a multilateral environmental agreement and rights under the WTO which have led to formal dispute settlement in any forum, including the WTO dispute settlement system.”²⁷

Hence, negotiators should use the opportunity of the Millennium Round to clarify the status of Multilateral Environmental Agreements in WTO law and exempt any measure adopted in order to implement such an agreement - including measures coming within the purview of reserve clauses affirming States’ rights to adopt more stringent measures - from trade disciplines.²⁸

Defining ‘investment’ and ‘expropriation’

Another aspect where *NAFTA* serves more as a deterrent than an example concerns the definition of ‘investment’ and rules on expropriation. The *NAFTA*, compared to some of the agreements that were concluded as part of the Uruguay Round, e.g. the *General Agreement on Trade in Services* or the *Agreement on Trade-Related Investment Measures (TRIMs)*, contains an expansive definition of what constitutes an ‘investment’. Thus, *NAFTA* Art. 1139 defines as an ‘investment’ (emphases added):

- “(a) an enterprise
- (b) an equity security of an enterprise
- (c) a debt security of an enterprise
 - (i) where the enterprise is an affiliate of the investor, or
 - (ii) where the original maturity of the debt security is at least three years, but does not include a debt security, regardless of original maturity, of a state enterprise;
- (d) a loan to an enterprise

²⁷ *Ibid.* at 31.

²⁸ And on this issue *NAFTA* Art. 104 could serve as a useful starting point. According to this provision, in the event of any inconsistency with obligations arising under *CITES*, the *Montreal Protocol*, the *Basel Convention*, and bilateral agreements listed in Annex 104.1 obligations under these agreements and conventions

“shall prevail to the extent of the inconsistency, provided that where a Party has a choice among equally effective and reasonably available means of complying with such obligations, the Party chooses the alternative that is the least inconsistent with the other provisions of this Agreement [= *NAFTA*].”

The provision is silent, however, on the issue of a conflict arising out of recourse to reserved powers under *CITES* and *NAFTA*.

²⁵ *Ibid.* at para. 157.

²⁶ *Trade Measures in Multilateral Environmental Agreements: Synthesis Report of Three Case Studies*, COM/ENV/TD(98)127/Final (OECD/Joint Working Party on Trade and Environment: Paris, 1999).

- (i) where the enterprise is an affiliate of the investor, or
 - (ii) where the original maturity of the loan is at least three years, but does not include a loan, regardless of original maturity, to a state enterprise;
 - (e) an interest in an enterprise that entitles the owner to share in income or profits of the enterprise;
 - (f) an interest in an enterprise that entitles the owner to share in the assets of that enterprise on dissolution, other than a debt security or a loan excluded from subparagraph (c) or (d);
 - (g) **real estate or other property, tangible or intangible, acquired in the expectation or used for the purpose of economic benefit or other business purposes; and**
 - (h) **interests arising from the commitment of capital or other resources in the territory of a Party to economic activity in such territory, such as under contracts involving the presence of an investor's property**
 - (i) in the territory of the Party, including turnkey or construction contracts, or concessions, or
 - (ii) contracts where remuneration depends substantially on the production, revenues or profits of an enterprise;
- ..."

As a 1996 paper by the OECD's trade directorate argued, this expansive definition of 'investment', with its asset-based approach, seeks to encompass "physical assets, intellectual property rights, **goodwill**, securities, long-term loans linked to an investment, joint ventures, concessions, licensing agreements and similar rights arising under contract".²⁹ Given the breadth of this definition and its tendency to include mere 'goodwill', there is thus a very real danger of market shares, obtained through reliance on a given regulatory state of affairs, turning into 'legitimate expectations' or 'goodwill' and thus mutating into protected 'investment' so defined. This threatens to stifle appropriate regulatory action in response to evolving scientific knowledge and understanding of environmental or health hazards, as investors will seek compensation for any resultant loss of market share.

²⁹ Working Party of the Trade Committee, *Trade and Investment Interface* (OECD: Paris (TD/TC/WP(96)32 of 6 Aug. 1996) at para. 26 (emphasis added).

This all the more, as *NAFTA's* wide definition of what is an 'investment' must be seen in the context of its equally wide definition of what constitutes compensable expropriation (emphases added):

"No party may directly or indirectly nationalize or expropriate an investment of an investor of another Party in its territory or take a measure tantamount to nationalization or expropriation of such an investment ("expropriation"), except:

- (a) for a public purpose;
- (b) on a non-discriminatory basis;
- (c) in accordance with due process of law and Article 1105(1); and
- (d) on payment of compensation in accordance with paragraphs 2 through 6."

As this definition includes 'indirect' nationalization as well as 'measures tantamount to nationalization or expropriation', the concept of compensable expropriation is *not* confined to governmental action which would come within traditional common law concepts of a 'taking' of property.³⁰ In fact, the breadth of these provisions - in conjunction with the availability of investor-State dispute settlement procedures or, indeed, access to domestic jurisdictions³¹ - would appear to create legitimate expectations in a given state of regulation and thus lead to its ossification as any attempt on the part of regulators to introduce new measures or develop further existing health, environmental or consumer protection regulations can give rise to massive claims for compensation.

The combination of a wide definition of 'investment' coupled with equally wide (and vague) concepts of 'expropriation' are nothing short of a recipe for thwarting appropriate and legitimate regulatory action in the face of new and growing threats to consumers and the environment. It rather creates an incentive for businesses and industry to fight such regulations by filing claims for compensation. Most illuminating, in this regard, was the Canadian government's abortive attempt to ban the gasoline additive MMT, suspected of being a dangerous neurotoxin and causing damage to anti-pollution equip-

³⁰ See the most instructive and illuminating discussion in the Canadian Environmental Law Association's submission *The Multilateral Agreement on Investment and the Environment: Context and Concerns*. Prepared for the House of Commons Sub-Committee on International Trade, Trade Disputes and Investment, November 24, 1997 (Canadian Environmental Law Association: Toronto, 1997 available at www.web.net/celal). Note again that the OECD draft for a Multilateral Agreement on Investment contained a virtually identical clause on expropriation that would have covered 'indirect' nationalizations and expropriations as well as 'any measure or measures having equivalent effect', see the *MAI Negotiating Text*, *supra* note 22, c. IV 2.

³¹ On the specifics of NAFTA's investment arbitration and dispute settlement procedures see M. J. Trebilcock & R. Howse, *The Regulation of International Trade* (Routledge: London/N.Y., 1995) 299.

ment in north American cars. Wishing to emulate American regulators, the Canadian government issued regulations banning use of the additives in Canadian fuels and gasoline as well. Faced with a compensation suit to the spectacular (and outrageous) amount of \$CDN 350 million by the American manufacturer of MMT, Ethyl Corp. of Virginia, the Canadian government was forced to back down in July 1998. The decision to ban MMT was reversed, officially on the grounds that the substance was found not to be noxious, and Ethyl-Corp. was paid \$CDN 20 million in compensation for its 'trouble' in addition to being given a letter of apology stating the above reason, the whole as an out-of-court settlement on 'amicable' terms.³²

In a like manner, the Sun Belt Water Corp. of Santa Barbara, Cal., is currently suing for \$ 400 million in damages as compensation for the decision in 1991 by the government of British Columbia to declare a moratorium on any large-scale exports of bulk water, an ecologically very controversial form of water exports for which Sun Belt had already obtained a licence from a previous B.C. government that was subsequently defeated in a general election in the province.³³

Consequently, in the event of a Millenium Round, negotiations should, from the very beginning, exclude from their work programme any attempt to reach an agreement on an asset-based approach to defining 'investment'. Rather, as proposed in the second *Lalumière* report,³⁴ negotiators should retain the narrower definitions of investment under the GATT's and TRIMs Agreements.

Restoring the precautionary principle

The EC, in its submission of 1 June 1999,³⁵ rightly raised the issue of clarifying the status of core environmental policy principles such as the precautionary principle under existing WTO rules. Regrettably, the submission is excessively cautious and vague with respect to concrete goals that should be attained in the course of renewed trade negotiations. The submission rather evasively only speaks of "reviewing if a clarification of the relationship

between multilateral trade rules and core environmental principles, notably the precautionary principle, is needed."³⁶

Clearly, what is needed in the light of the outcome in the *Hormones*-case,³⁷ is a sweeping amendment to the *Agreement on Sanitary and Phytosanitary Measures (SPS Agreement)* that will unreservedly confirm Members' right to adopt measures on the basis of the precautionary principle. While the Appellate Body's ruling went some way towards attenuating the force of the original panel report, the ultimate - concrete - outcome, following the Arbitrator's award in proceedings pursuant to Art. 21.3 (c) of the *Understanding on Rules and Procedures Governing the Settlement of Disputes*,³⁸ is still most unsatisfactory. For the concrete outcome is that WTO Members, if they choose to adopt measures on the basis of a precautionary approach, must 'pay' for it by incurring WTO-sanctioned retaliatory duties. From an environmental policy point of view, this, manifestly, is unacceptable.

Whether future conflicts over the application of the precautionary principle can be avoided by creating 'independent' research bodies that would be charged with the elaboration of international standards 'universally' accepted within the scientific community, as the second *Lalumière* Report suggests, would however appear to be doubtful. For technocratic solutions are premised upon the idea that value-free science can provide definitive answers to the question of 'how safe is safe enough?' when addressing health or environmental hazards in situations of scientific uncertainty. They tend to ignore policy aspects inherent to regulation of uncertain risks³⁹ and, hence, the necessity to implicate democratically-legitimated decision-makers, public interest organizations, and the public at large in decisions concerning the level of risk a society is collectively willing to accept. Moreover, precautionary standards frequently also address local or regional risks so that even from a functional-scientific point of view 'universally accepted' international standards may not always be appropriate.

³² Maude Barlow, "Global Rules Could Paralyze Us" *National Post* [of Canada] of 31 August 1999.

³³ *Ibid.* For a good summary of these and other examples of the stifling effect on regulation of NAFTA's investment rules see now Jean-François Girard et al., *La gestion de l'eau au Québec. Aspects juridiques et institutionnels. Mémoire du Centre québécois du droit de l'environnement. Présenté devant le Bureau d'audiences publiques sur l'environnement (BAPE) dans le cadre des audiences sur la gestion de l'eau au Québec (Montréal: CQDE, November 1999) 102-112.*

³⁴ See *supra* note 2, 2nd part, c. II B 1.

³⁵ *EC Approach to Trade and Environment in the NEW WTO Round. Communication from the European Communities*, WT/GC/W194 of 1 June 1999.

³⁶ *Ibid.*

³⁷ *EC - Measures Concerning Meat and Meat Products (Hormones)* (Complaint by the United States) (1997), WTO Doc. WT/DS26/R/USA (Panel Report); *EC - Measures Concerning Meat and Meat Products (Hormones)* (Complaint by Canada) (1997), WTO Doc. WT/DS48/R/CAN (Panel Report); *EC - Measures Concerning Meat and Meat Products (Hormones)* (1998), WTO Doc. WT/DS26/AB/R (Appellate Body Report).

³⁸ *EC - Measures Concerning Meat and Meat Products (Hormones)* (1998), WTO Doc. WT/DS25/15-WT/DS48/13 (98-2227) (Award of the Arbitrator).

³⁹ For a recent survey of some of the issues pertaining to the science-policy divide see J. D. Fraiberg & M. J. Trebilcock, "Risk Regulation: Technocratic and Democratic Tools for Regulatory Reform" (1998) 43 McGill L.J. 835; see also W. E. Wagner, "The Science Charade in Toxic Risk Regulation" (1995) 95 Col. L. Rev. 1613.

Shifting the onus

A related concern centres on how dispute settlement panels and the Appellate Body have distributed the burden of proof on parties to a dispute settlement procedure. While it probably corresponds to the structure of the WTO Agreement and in particular the nature of *GATT* Art. XX as an exception to the substantive obligations under Art. I through IX as the general rules, the consistent jurisprudence of requiring Parties who rely on the exception to prove their measures truly come within the ambit of Art. XX para. (b) or (g) - once the other Party has made a *prima facie* case of a violation of any of the substantive obligations under Arts. I through IX -, unduly burdens environmental policy. However consistent with the WTO's underlying policy conception and free trade credo, such a distribution of the burden of proof bespeaks a deregulatory bias on the implicit presumption that, *prima facie*, environmental policy measures are a form of protectionism and only in exceptional circumstances justified as having been genuinely adopted in the public interest.

From an environmental policy point of view, environmental protection measures should, of course, be accorded priority over whatever interest WTO Members may have in liberalized trade and invest-

ment. Hence, the onus should be reversed. It should rather be on those who seek to demonstrate that a measure, contrary to its ostensible labelling as environmental policy, amounts to unjustified economic protection. It goes without saying that changes in the distribution of market shares, reflecting a dynamic evolution of regulatory policy, should not be admissible as conclusive evidence of protectionist motives.

Conclusion

A number of other issues remain that could not be addressed given limitations of time and space. They concern first and foremost a more balanced representation of interests other than trade and business in the WTO's dispute settlement procedures and the possible regulation, within the framework of the WTO, of labelling schemes. When dealing with these as well as the issues examined more closely above, negotiators should remember that, unless the WTO is seen as becoming ideologically less one-sided and shifting away from its narrow focus on free trade, deregulation, and 'free' markets, public support in a number of countries for a 'liberal' free trade order will continue to erode, as events surrounding the Seattle Conference made abundantly clear.

EU Enlargement: Screening Results in the Environmental Sector

Ingmar von Homeyer, Lena Kempmann, Anneke Klasing

European Union (EU) heads of government decided at the June 1993 European Summit in Copenhagen that Central and Eastern European Countries (CEECs) associated with the EU may under certain conditions accede to the Union.² As with previous accessions, the adoption and practical implementation of the *acquis communautaire*, the common body of Community legislation, is one of the principal conditions for joining.

Screening

Between April 1998 and June 1999 the European Commission "screened" the legislation of the five "ins" - Poland, the Czech Republic, Hungary, Slovenia and Estonia - with which detailed accession negotiations have already started.³ The results of the screening exercise indicate the extent of harmonisation with the *acquis* which the five accession countries have already achieved. As illustrated in the Table, a large number of legislative gaps and implementation problems were identified.

The screening facilitated a first comprehensive exchange of opinions between the Commission and the accession countries regarding, for example, divergent understandings or interpretations of the requirements for transposition of the *acquis* into national law. In particular, however, the screening allowed for detailed discussions of the potential need for transition periods. It thereby functioned as an important source of information to the Commission which will make proposals for a Common Position of the Council. The Common Position will then form the basis of the detailed accession negotiations. In addition to the screening reports,⁴ the Common Position will also be based on the information contained in the position papers⁵ provided

by the accession countries and the opinions of the Member States, both of which refer to the screening results. The detailed negotiations on the environmental chapter of the *acquis* will probably start in November 1999.

Transition periods

The Table shows the Directives for which accession countries and the Commission indicated during the screening that transition periods ("T") may be necessary, primarily because of implementation problems. The Table is based on the Commission's screening reports. Additional information given in the position papers concerning additional transition periods or the duration of transition periods has been added. Transition periods which were mentioned in the screening report but not in the position paper were not removed from the Table. Each screening report contains two sections. The contents of the first section have been agreed by the respective accession country and the Commission. The second section contains additional comments by the Commission. In the Table "D" and "W" refer to these comments. "W" ("warning") indicates that the Commission stated in the screening report that considerable additional efforts are necessary if a transition period or a further extension of a transition period is to be avoided. "D" ("doubt") indicates that the Commission expects that an additional or a longer transition period will be necessary. Classification of Commission statements in the screening reports as either "D" or "W" reflects the interpretation of the authors. As illustrated by the large number of "Ws" and "Ds", the Commission expects that significantly more and longer transition periods will be necessary than those indicated by the accession countries. It should be emphasised that some transition periods concern relatively minor issues, such as the adaptation of lists of endangered species under the Birds and Habitats Directives, while other transition periods indicate a need for major administrative capacity building and/or physical investment.

¹ Screening results on radiation protection are not covered in this article.

² Ten CEECs - the Czech Republic, Poland, Hungary, Romania, Bulgaria, Slovenia, Slovakia, Estonia, Latvia and Lithuania - have concluded association agreements with, and applied for membership of, the EU.

³ EU heads of government will decide in December 1999 at the European Summit in Helsinki whether detailed accession negotiations will also be opened with the remaining five associated CEECs.

⁴ European Commission (1999), *Poland: Screening Results. Environment, Enlargement*. No. MD 283/99, DS 283/99, Brussels: European Commission; European Commission (1999), *Czech Republic: Screening Results. Environment, Enlargement*. No. MD 286/99, DS 286/99, Brussels: European Commission; European Commission (1999), *Slovenia: Screening Results. Environment, Enlargement*. No. MD 286/99, DS 286/99, Brussels: European Commission; European Commission (1999), *Estonia: Screening Results. Environment, Enlargement*. No. MD 284/99, DS 284/99, Brussels: European Commission; European Commission (1999), *Hungary: Screening Results. Environment, Enlargement*. No. MD 282/99, DS 282/99, Brussels: European Commission.

⁵ Government of the Republic of Poland (1999) *Poland's Position Paper in the Area of "Environment" for the Accession Negotiation with the European Union*. Conference on Accession to the European Union - Poland, Brussels, 13 October 1999; Government of the Republic of Estonia (1999) *Estonia. Position Paper EU Membership Negotiations: Chapter 22 Environment*. Conference on Accession to the European Union - Estonia, Brussels, 2 August 1999; Government of the Republic of Hungary (1999), *Negotiating Position of the Government of the Republic of Hungary on Chapter 22 Environment*. Conference on Accession to the European Union - Hungary, Brussels, 29 July 1999; Government of the Czech Republic (1999), *Position Paper of the Czech Republic on Chapter 22 Environment*. Conference on Accession to the European Union - the Czech Republic,

Brussels 14 July 1999; Government of the Republic of Slovenia (1999), *Negotiating Position of the Republic of Slovenia on Chapter 22 Environment*. Conference on Accession to the European Union - Slovenia, Brussels, 27 July 1999.

Screening results for the environmental *acquis*: Transition periods as indicated by the accession countries and the European Commission

	Cz	Est	H	Pl	Slo
HORIZONTAL LEGISLATION					
Environmental Impact Assessment (85/337/EEC)			W	W	
Access to Environmental Information (90/313/EEC)				W	W
Reporting on Implementation (91/692/EEC)	W		W	W	W
Eco-Management and Audit (EEC/1836/93)		W		W	W
Information on Ambient Air Pollution (97/101/EC)			T		
NATURE CONSERVATION					
Trade in Endangered Species (338/97/EC)			W		T
Birds Directive (79/409/EEC)	2005*	2010*	TW	T	2004-06
Habitats Directive (92/43/EEC)	2005*	2010*	T	T	2004-06
WATER QUALITY					
Urban Waste Water Directive (91/271/EEC)	2008-10*D	2010*W	2015*D	2015*	2017
Groundwater Directive (80/68/EEC)		2006*	2007*	W	
Nitrate Pollution from Agricultural Sources (91/676/EEC)	2006*	2008*		2010*	W
Discharge of Dangerous Substances (76/464/EEC)	TW	2006*	2009*D	T	T
Abstraction of Drinking Water (75/440/EEC)	D	T		2010*	W
Surface Water Measurement Methods (79/869/EEC)				W	W
Drinking Water Directive (80/778/EEC)	2006 D	2013 D	TW	TW	W
Bathing Water Directive (76/160/EEC)	D		T	D	W
Fish and Shellfish Water (78/659/EEC & 79/869/EEC)	D	T		T	
INDUSTRIAL POLLUTION AND RISK MANAGEMENT					
Integrated Pollution Prevention and Control (96/61/EC)	2012*D	W	TD	2010*	2011*
Air Pollution from Industrial Plants (84/360/EEC)			T		
Asbestos (87/217/EEC)	W		D	W	D
Large Combustion Plants (88/609/EEC)	W		TW	D	W
CHEMICALS AND GENETICALLY MODIFIED ORGANISMS (GMOs)					
Risk Assessment of Existing Substances (EC/1488/94)	W	W		W	D
Import and Export of Dangerous Chemicals (EEC/2455/92)	W			W	
Placing on the Market of Biocidal Products (98/8/EC)	W	D	W	W	D
Animal Testing (86/609/EEC)				W	
Contained Use of GMOs (90/219/EEC)	W	D		W	D
Deliberate Release of GMOs (90/220/EEC)	W	D		W	D
Control of Major Accident Hazards (Seveso II) (96/82/EC)	W	D	T		T
AIR QUALITY					
Air Quality Framework (96/62/EC)	W		TW		W
Ozone Depleting Substances (EC/3093/94)	W		W	2005*	
VOC Emissions from Petrol (94/63/EEC)	W	2007	W	2009*	
Lead in Petrol (85/210/EEC)	W				
Quality of Petrol and Diesel Fuels (98/70/EEC)	W		W	2009*	2004*
Emission from Non-road Mobile Machinery (97/768/EEC)	W			T	
Sulphur Content of Liquid Fuels (93/12/EEC)	2005 D			D	
WASTE MANAGEMENT					
Waste Framework (75/442/EEC)		D	D	2012*	
Hazardous Waste (91/689/EEC)	D	D	TW	2012*	
Hazardous Waste Incineration (94/67/EC)	D	W	T	D	W
Landfill (99/31/EEC)					D
Municipal Waste Incineration (89/429/EEC & 89/369/EEC)				W	
Emission of Dioxins and Furans (97/283/EEC)			T		
Packaging and Packaging Waste (94/62/EC)	2005*W	D	T	2007*W	2007*
Shipment of Waste (EEC/259/93)			W	2012*	
Disposal of Waste Oils (75/439/EEC)	W	D	T	2005*W	
Titanium Dioxide Waste (78/178/EEC)				W	W
PCB/ PCT Disposal (96/59/EC)	W		T	W	
Sewage Sludge (86/278/EEC)			W		
Batteries and Accumulators (91/157/EEC)		D	T	D	

1) Note: T= Transition period without specification of length; Number= Year of indicated end of transition period; D= Doubt expressed by the Commission; W= Warning expressed by the Commission.

Source (except *): Screening reports (supra note 4); * Source: Position papers (supra note 5).

According to official Commission statements, the “ins” should be able to legally transpose the environmental *acquis* in the medium-term.² But the Commission is increasingly sceptical of their ability to complete transposition by the time of their envisaged accession - Hungary plans to accede in 2002, the remaining four “ins” in 2003. The screening revealed that in most accession countries progress has been slower than expected. As an official of the Commission’s Environment Directorate put it: “It was clear [...] that very little has already been transposed [...] it is highly doubtful whether legal transposition will be accomplished by the candidates own official target-dates for accession”.³

The adoption of the environmental *acquis* confronts the accession countries with the twin difficulties of drafting and adopting the necessary legislative acts. In this context, the various institutional and political factors which influence national legislative procedures and administrative structures play a large role. For example, the weak political position of the Czech minority government has held up transposition of EC environmental legislation. The Czech government lacks the political power and authority to suppress strong inter-ministerial rivalries and push new laws which comply with EC legislation through Parliament. This situation has not only led to delays in the legislative process but in some cases new legislation does not even conform to European Community (EC) law.

The formal legal transposition of EC environmental legislation is also hindered by the overtaxing of the administrative institutions charged with drafting and enacting the relevant rules in the accession countries. Not only do these countries have to adopt the entire *acquis*, but they must also fundamentally reform their economic and legal institutions by introducing new regimes of ownership, privatisation, and dismantling heavy state subsidies. Open questions relating to these issues are holding up the introduction of measures in Estonia which, if introduced, could lead to a reduction in the high levels of environmental pollution caused by the use of oil shale for energy production. Similarly, the adoption of EC legislation on fuel quality in Poland is delayed by, among other things, the ongoing restructuring and privatisation of the oil industry.

Practical implementation

Although there are considerable problems regarding formal transposition, effective implementation poses an even bigger challenge. This is confirmed by the screening results.

Generally, costs are a big problem in implementing the environmental *acquis* in the accession countries. The Commission estimates that the financial means needed for full implementation of the environ-

mental *acquis* sum up to about EUR 120 billion for all ten candidate countries, of which about EUR 65 billion are for the five “ins”. The bulk of the investment will be used for air pollution abatement, water and waste water management and waste management.⁴

The administrative requirements of full implementation of EC environmental law pose a second major challenge. The environmental *acquis* is substantially more comprehensive today than at the time of the EC’s southern enlargement as a result of, among other things, the completion of the Internal Market. EC environmental legislation has also become considerably more complex in recent years. Implementation requires sophisticated technical expertise and highly effective structures for communication, co-ordination, consultation and dissemination of information. The accession countries generally have a deficit of personnel, technical resources and relevant experience in the inspectorates which are charged with the enforcement of environmental regulations.⁵

Horizontal legislation

The Table shows that problems regarding approximation of EC horizontal environmental legislation in the “ins” are considered to be relatively minor. Only one transition period was indicated. The Commission issued several “warnings” but only one “doubt”. It should be noted, however, that the participation of social actors as foreseen, for example, by the Directive on Environmental Impact Assessment may turn out to be relatively ineffective in most accession countries due to a relatively underdeveloped civil society.⁶

Sectoral legislation

Major problems exist regarding implementation of EC sectoral environmental legislation. As illustrated in the Table, a particularly large number of transition periods will probably be required to implement EC legislation in the fields of water and waste management, air quality and industrial risk.

Problems in the area of **nature conservation** are primarily caused by lack of data for the identification and designation of protected areas, weak administrative capacity, and missing know-how for participation in the planned Natura 2000 network. It should be noted, however, that many present EU Member States also lag behind in the implementation of the Habitats Directive.⁷

Implementation of EU **water legislation** probably poses the biggest challenge for successful environmental approximation in the accession countries. All “ins” have indicated a need for (often quite long) transition periods, in particular regarding implementation of the Urban Waste Water Treatment

Directive (UWWTD) which requires very high investments for the construction of water treatment plants and sewage systems. The fact that several countries have not yet sufficiently addressed the issue of sensitive areas as defined under the UWWTD is alarming because the identification of these areas is a prerequisite for the preparation of detailed implementation programmes. If, as is likely, large areas must be designated as sensitive, costs for implementation of the UWWTD will increase sharply. In addition, implementation of Directives such as the Bathing Water Directive depend on implementation of the UWWTD. In most accession countries transition periods may also be necessary for several other Directives, including the Drinking Water Directive and the Directive on Discharge of Dangerous Substances and the Directive on Nitrate Pollution. Finally, the screening reports do not discuss problems which might arise from transposition and practical implementation of Commission proposals for Directives which have not yet been adopted. Implementing the planned Water Framework Directive (COM (99)271), if adopted, is likely to require major administrative restructuring and capacity building,⁸ and may therefore require additional transition periods.

Implementation of the Directive on Integrated Pollution Prevention and Control (IPPC) creates considerable problems in the field of **industrial pollution and risk assessment**. Most accession countries expect transition periods to be necessary for full implementation of the IPPC Directive. However, transition periods are frequently only envisaged for existing plants falling under the Directive. The Commission has severe doubts whether this will be sufficient. The administrative and substantive requirements of the IPPC Directive are likely to result in longer transition periods and/or additional transition periods for new plants. Despite a sharp fall in relevant air emissions over recent years, implementation of the Large Combustion Plant Directive may cause problems in several accession countries. The Table shows that these problems have not yet been fully realised by most accession countries. The planned revision of the Directive, which is not discussed in the screening reports, is likely to make compliance even more difficult.⁹

In the area of **air quality legislation** accession countries face particular difficulties in implementing the Directives on Volatile Organic Compounds (VOC) and Quality of Petrol and Diesel Fuels. Slovenia is the only country where no major problems are expected. Other countries need to invest heavily in improved refineries and distribution systems. As mentioned above, practical implementation of the Directives is hampered by ongoing processes of restructuring and privatisation of the

oil industry in Poland. Implementation of the Directive on Limit Values for Sulphur Dioxide, Nitrogen Dioxide and Oxides of Nitrogen, Particulate Matter and Lead in Ambient Air (99/30/EC) appears difficult. This Directive has only been adopted recently. It is therefore not discussed in the screening reports. In Poland about half of the population lives in areas where even present EC guidelines for annual exposure to particulates are exceeded.¹⁰ The widely expected sharp increase in the volume of traffic in accession countries may cause additional problems.¹¹

As indicated in the Table, there is only low awareness most accession countries of potential problems which may arise from the requirements of formal legal transposition and practical implementation of EC legislation in the field of **chemicals and genetically modified organisms**. Widespread lack of sufficiently experienced and qualified staff, appropriate administrative structures, and capacities for handling of large and complex data-sets are the main reason for the Commission's warnings and doubts in this area. Due to the availability of more resources in the larger accession countries, it still seems possible for these countries to achieve implementation in time for accession if efforts are strongly intensified. However, Slovenia and Estonia may face severe difficulties, especially as a result of staff shortages.

The Table indicates that a considerable number of transition periods is likely to be necessary for the implementation of EC **waste management** legislation. Most accession countries have realised that transition periods will be necessary to implement the Packaging Waste Directive. Implementation of this Directive is difficult. The setting up of effective recycling systems is a particularly complex organisational task involving a large number of actors. In addition, consumers must be educated to use recycling systems. The Directives on hazardous waste also pose severe problems, which have not yet been fully realised by most accession countries, all of which are likely to need transition periods to achieve full compliance with EC legislation. There is considerable uncertainty as regards the Directive on Incineration of Hazardous Waste, among other things, because plans to build new incinerators may be opposed by local residents and authorities. The Landfill Directive (99/31/EC), which has only been adopted recently, is not discussed in most screening reports. This Directive is very likely to give rise to additional problems due to high costs of practical implementation.¹²

"Laggards" and "leaders"

In its most recent annual progress report the Commission singled out Poland and the Czech Republic

for criticism because these two countries have only made minor progress in approximation.¹³ The Commission's statement, which refers to the whole *acquis*, appears to be equally valid for the environmental sector.

Poland was the only country which had not answered the Commission's implementation questionnaire, leaving the Commission with only "scattered" knowledge of the state of implementation of the environmental *acquis* in this country. The case of Poland is particularly difficult because the country is not only the largest and politically most important, but also one of the poorest of the five "ins". Against this background, the fact that the first round of EU enlargement will politically not be possible without Poland should not lead to softer criteria for accession in the environmental sector. However, it must also be taken into account that more than 20% of the Polish workforce are still employed in the relatively poor agricultural sector. EU accession is expected to lead to strong social and political tensions in this sector, due to problems associated with the Union's Common Agricultural Policy (CAP). These tensions may be further heightened by the costs of implementing EC environmental legislation, in particular in the water sector, because there is a risk that these costs will have to be borne disproportionately by the rural population. In a few cases, long transition periods may therefore be necessary in order to reduce total costs.¹⁴ The preparation of an urgently needed comprehensive Polish approximation strategy for the environmental sector would appear to be an essential pre-condition for this approach.

As mentioned above, the weak political position of the Czech minority government has held up transposition of EC environmental legislation in this country. Estonia, Hungary and Slovenia have made some progress in the process of approximation in the environmental sector. But approximation is still far too slow and lags behind most other areas of EC law.¹⁵ Slovenia, in particular, has significantly increased the speed of formal transposition. Yet, institutions to implement the new laws are still missing.¹⁶ It should be pointed out that lack of progress

in approximation does not necessarily correspond to failure of environmental policy. In Poland, for example, environmental policy making has in many respects been more successful than in many other accession countries,¹⁷ despite approximation problems.

Conclusion

The large number of transition periods indicated by the accession countries and an even larger number of doubts and warnings expressed by the Commission suggest that for each of the "ins" transition periods may be necessary for about 1/4 of the total of 89 Directives¹⁸ contained in the Commission's Acquis Guide.¹⁹ The prospect of a large number of transition periods raises challenges for European environmental policy in several respects. First, there is a danger that environmental concerns will fall behind other considerations in the enlargement process and in EU policy-making in general because implementation of the environmental *acquis* is likely to require far more transitional periods than most other sectors of EC legislation.²⁰ Second, despite the wave of environmental reforms in the early 1990s in most accession countries, today, environmental protection ranks low on the political agenda. Therefore widespread use of transition periods may lead to additional delays in the implementation of the environmental *acquis*. In these circumstances it is essential to couple transition periods with detailed implementation schedules and other mechanisms to ensure full and timely compliance.²¹ Finally, if, due to numerous and long transition periods, the accession countries were still a long way even from implementation of existing EC legislation by the time of accession, the chances that they would try to block legislative initiatives aiming at higher environmental standards could be expected to rise sharply after accession. In this case long transition periods would contribute to other factors, such as economic weakness and lack of strong environmental policy traditions, pushing accession countries to join the group of environmental "laggards" among present Member States.²²

RECENT COURT DECISIONS

European Court Decides in Favor of Improved Access to Environmental Information

On 9 September 1999 the European Court of Justice issued a judgement in which it was declared that Germany has failed to fulfil several of its legal obligations under the Directive 90/313/EEC (Freedom of Access to Information on the Environment).

History of the case

Since transposition of the Directive 90/313/EEC into German law in 1994 by the Umweltinformationsgesetz (UIG) there have been many complaints towards the EU Commission, also brought forward by the Öko-Institut, that certain provisions of the UIG were not compatible with the obligations under the directive. In 1997, after issuing a reasoned opinion on which the German Government did not answer, the EU Commission brought an action under Article 169 of the EC Treaty (now Article 226) for a declaration that Germany had failed to fulfil several of its obligations.

The action of the Commission relied on four grounds and has been successful under most aspects. Only the Commission's claim that specific information held by environment courts, criminal prosecution and disciplinary authorities not necessarily obtained in the context of judicial activities would not be transmitted to the public was rejected by the court. With respect to this claim the Commission did not submit evidence that the implementation of the directive in Germany was outside the scope of the directive.

Incorrect exclusion of information during administrative procedures

The Commission blamed Germany for an incorrect transposition of Article 3.2 third indent of the first subparagraph owing to the exclusion of the right to obtain information during "administrative proceedings".

During the hearings the German Government admitted that the UIG excludes "preliminary hearings" altogether. However, the European Court of Justice (ECJ) confirmed a previous decision (see C-321/96 Mecklenburg v Kreis Pinneberg [1998] ECR I-3809) stating, that the directive needs to be interpreted in a way that only an administrative measure which precedes a contentious or quasi-contentious procedure and arises from the need to obtain proof or to investigate a matter prior to the opening of the

actual procedure is a "preliminary investigation procedure" as provided by the directive.

Therefore, the ECJ decided that the UIG exceeds the scope of derogation provided for in Article 3.2 EU Directive.

No provision for information to be supplied in part where possible

The UIG contains no express provision for information to be supplied in part where it is possible to detach such information. The directive, as claimed by the Commission, would confer these rights on individuals and hence the domestic law would also need to grant these rights precisely and clearly. The ECJ supported this view and ruled "that it is necessary for the legal situation to be sufficiently precise and clear to enable the persons concerned to know the full extent of their rights". As the UIG did not fulfil this obligation regarding partial communication of information this ground of the Commission was likewise upheld by the ECJ.

Incorrect imposing of charges for request refusal

The third ground of the action of the Commission refers to the fact that German rules provide for charges to be imposed even if a request for information is refused by the competent authorities. Moreover, the Commission claimed that the UIG does not provide charges to be limited to a reasonable sum. Both aspects would be inconsistent with Article 5 of the EU Directive.

With respect to the first part of this ground the ECJ followed the Commission's opinion. The court stated that Article 5 of the directive permits Member States to make charge for "supplying" information and not for the administrative tasks connected with a request for information. The Court noted that raising charges without providing information could dissuade people wishing to obtain information from making a request to that effect.

This would be in contradiction to the purpose of the directive that is to confer a right on individuals

which assures them freedom of access to information on the environment without having to prove an interest.

Charges have to be at reasonable level

The Court therefore decided that generally charges under the directive could be imposed for supplying information on the environment only and that these charges may not exceed a "reasonable cost".

The Court stressed that the term "reasonable" must be understood in a sense that it does not authorise Member States to demand the entire amount of costs, in particular indirect ones, actually incurred for the State budget in conducting an information search.

Although the Commission failed to prove that the legislation in Germany leads in practice to charges which go beyond a "reasonable amount", this verdict of the ECJ is of particular relevance for future practice in Member States to impose non-dissuasive charges for requests on environmental information.

The ECJ judgement is a big step towards a wide application of the freedom of access to environmental information directive in its original sense, as the Court makes clear that limits to this freedom need to be interpreted narrowly.

Ralf Jülich

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Editors:

Ralf Jülich

Birgit Dette

Heike Unruh

Environmental Law Network International (*elni*)

Address:

elni

c/o →Öko-Institut e.V.

Elisabethenstr. 55-57

64283 Darmstadt

Germany

Tel: +49 (0)61 51/81 91-31

Fax: +49 (0)61 51/81 91-33

e-mail: unruh@oeko.de or juelich@oeko.de

<http://www.oeko.de/elni>

Manuscripts should be submitted to the Editors using an IBM compatible word processing package. Articles that are not signed are in the responsibility of the Editors.

The *elni* Newsletter is the Newsletter of the Environmental Law Network International. It is distributed twice a year to its members at the following price levels: commercial users (consultants, law firms, government administrations): DM100/US\$60; private users, students, libraries: DM40/US\$25. Members from Central and Eastern Europe will receive the *elni* Newsletter free of charge. Non-members can order single issues at a fee of DM 10 incl. packaging. The Environmental Law Network International also welcomes an exchange of publications as a way of payment. Private members and libraries who feel that the charge is exceeding their financial capability can subscribe to the newsletter at a reduced rate on request.

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Authors of this issue:

Andrea Burzacchini, the International Council of Local Environmental Initiatives (ICLEI), Freiburg, Germany

Sven Deimann, LL.M. (McGill), environmental lawyer, Berlin, Germany

Christoph Erdmenger, scientific project coordinator, ICLEI, European Secretariat Freiburg, Germany

Ingmar von Homeyer, Research Fellow, Ecologic, the independent not-for-profit, Centre for International & European Environmental Research, Berlin, Germany

Ralf Jülich, coordinator of the Environmental Law Network International and of the environmental law division, Öko-Institut, Darmstadt, Germany

Lena Kempmann, Anneke Klasing, research assistants, Ecologic, Berlin

Bent Ole Gram Mortensen, Assistant Professor of Law, PhD University of Southern Denmark, Department of Management, University of Southern Denmark, Odense

Gerhard Roller, Professor of Law, Fachhochschule Bingen, Bingen, Germany

Rajkumar Deepak Singh, Senior Law Officer, Centre for Environmental Law, WWF-India Secretariat, New Delhi, India

Adrian Smith and Steve Sorrell, Research fellows, SPRU - Science and Technology Policy Research, Mantell Building, University of Sussex, Brighton, BN1 9RF, UK

TASKS AND ACTIVITIES

What is elni?

The Environmental Law Network International (*elni*) is a network of individuals and organisations who share an interest in environmental law. *elni* provides an international forum for the exchange of news, views, ideas and experiences in environmental law and in so doing promotes international communication and cooperation of those working in this field.

elni was set up in 1990 and now has over 300 members including legal practitioners and academic lawyers from all over the world.

Why is elni Necessary?

In many countries lawyers are working on aspects of environmental law, often with environmental initiatives and organisations or as legislators, but without contact with other lawyers abroad. Such contact and communication is vital for the successful and effective implementation of environmental law.

How are elni's Objectives Achieved?

elni coordinates a number of different activities to facilitate the communication and contact of those interested in environmental law around the world.

1 Studies of the Environmental Law Network International

elni publishes a series of books entitled "Publications of the Environmental Law Network International". Each volume contains papers by various authors on a particular theme in environmental law and in some cases is based on the proceedings of the annual conference. There are nine volumes to date:

- International Environmental Impact Assessment
- Participation and Litigation Rights of Environmental Associations in Europe,
- Civil Liability for Waste,
- Licensing procedures for Industrial Plants and the Influence of EC Directives,
- Environmentally Sound Waste Management,
- Dynamic International Regimes,
- Environmental Control of Products and Substances,
- Environmental Rights - Law, Litigation and Access to Justice,
- Voluntary Agreements - The Role of Environmental Agreements

2 elni Newsletter

The *elni* Coordinating Bureau in Darmstadt, Germany, produces and sends to each member the *elni*

Newsletter twice a year containing member's reports on projects, legal cases and developments in environmental law. *elni* therefore encourages its members to submit such articles to be published in the Newsletter in order to allow the exchange and sharing of experiences with other members.

3 Annual Conference

The annual conference focuses on a different theme in environmental law and is held at a different venue each year. This event allows members to meet, exchange ideas and plan cooperative projects as well as being legally informative with talks from lawyers and others from all over the world.

4 Coordinating Bureau

The Coordinating Bureau is at the Öko-Institut in Darmstadt, Germany, which is a non-governmental, non-profit making research institute. The Bureau acts as an information centre where members can obtain information about others working in certain areas thus promoting the development of international projects and cooperation.

elni's Board

At the *elni* annual conference in 1991, the participating members decided to create a board that assumes partial responsibility for the Network's future development. Members of the Board are:

James Cameron, barrister, Foundation for International Environmental Law and Development (FIELD), SOAS, University of London, U.K.

Jerzy Jendroska, lawyer, member of the Research Group on Environmental Law at the Polish Academy of Science in Wroclaw, Poland

Sanford Lewis, lawyer, director of the Good Neighbor Project for Sustainable Industries, Waverly, USA

Stefano Nespor, lawyer, editor of the "Rivista Giuridica dell'Ambiente", Milano, Italy

Nelly Paleologou, member of the board of the Greek Environmental Law Association, Birdlife International, Brussels, Belgium.

Marga Robesin, staff lawyer with the Stichting Natuur en Milieu, Utrecht, the Netherlands

Gerhard Roller, professor of law, Bingen University of Applied Sciences, Bingen, Germany

Nicolas de Sadeleer, lawyer and academic for the Centre d'étude du droit de l'environnement (CEDRE) at the facultés universitaires Saint-Louis, Brussels, Belgium

Todd True, lawyer, Sierra Club Legal Defense Fund, Seattle, USA

elniPUBLICATIONS

elni (Ed.): Voluntary Agreements: The Role of Environmental Agreements
Cameron May Ltd., London, 1998, 544pp,
ISBN 1874-698-627, pb., £60

*elni (Ed.): Environmental Impact Assessment
European and Comparative; Law and
Practical Experience*
Cameron May Ltd. London 1997, 284pp,
ISBN 1 874698 074, pb. £40 post paid UK,
£45 post paid EU, £50 post paid other countries.

*Sven Deimann / Bernard Dyssli (Eds.):
Environmental Rights: Law, Litigation
and Access to Justice*
Cameron May Ltd. London 1995, 340pp,
ISBN 1-874698-11-2, pb. £40 post paid UK,
£45 post paid EU, £50 post paid other countries.

*Betty Gebers / Jerzy Jendroska (Eds.):
Environmental Control of Products and
Substances:
Legal Concepts in Europe and the
United States*
Peter Lang Verlag Frankfurt/M., Bern, New
York, Paris 1994, Vol. 6, 179pp., ISBN 3-631-
47672-8, pb. DM65,00

*Thomas Gehring: Dynamic International
Regimes:
Institutions for International Environmental
Governance*
Peter Lang Verlag Frankfurt/M., Bern, New
York, Paris 1994, Vol. 5, 515pp., 22 fig. 12
tab., ISBN 3-631-47631-0, pb. DM128,00

*Andrea Sander / Peter Küppers (Eds.):
Environmentally Sound Waste Man-
agement?
Current Legal Situation and Practical
Experience in Europe*
Peter Lang Verlag Frankfurt/M., Bern, New
York, Paris, 1993, Vol. 4, 241pp., ISBN 3
631-45863-0, pb. DM74,00

*Betty Gebers / Marga Robensin (Eds.):
Licensing Procedures for Industrial
Plants and the Influence of EC Direc-
tives*
Peter Lang Verlag Frankfurt/M., Bern, New
York, Paris 1993, Vol. 3, 166pp., ISBN 3-631-
45580-1, pb. DM59,00

*Peter v. Wilmowsky / Gerhard Roller:
Civil Liability Waste: A Legal Analysis of
the Proposed EC Directive*
Peter Lang Verlag Frankfurt/M., Bern, New
York, Paris 1992, Vol. 2, 196pp., ISBN 3-631-
45172-5, pb. DM59,00

*Martin Führ / Gerhard Roller (Eds.):
Participation and Litigation Rights of
Environmental
Associations in Europe
Current Legal Situation and Practical
Experience*
Peter Lang Verlag Frankfurt/M., Bern, New
York, Paris 1991, Vol. 1, 196pp., ISBN 3-631-
43648-3, pb. DM59,00