Robert Schuman Centre

The New European Agencies
The European Environment Agency and Prospects for a European Network of Environmental Administrations

Karl-Heinz Ladeur

RSC No. 96/50

EUI WORKING PAPERS

EUROPEAN UNIVERSITY INSTITUTE
Ladeur: The New European Agencies
The European Environment Agency
and Prospects for a European Network
of Environmental Administrations
The Robert Schuman Centre was set up by the High Council of the EUI in 1993 to carry out disciplinary and interdisciplinary research in the areas of European integration and public policy in Europe. While developing its own research projects, the Centre works in close relation with the four departments of the Institute and supports the specialized working groups organized by the researchers.
The New European Agencies
The European Environment Agency and Prospects for a European Network of Environmental Administrations

KARL-HEINZ LADEUR
Hamburg/Florence

The Conference on The New European Agencies was held at the EUI on 1-2 March 1996 and directed by Yves Mény and Giandomenico Majone

EUI Working Paper RSC No. 96/50

BADIA FIESOLANA, SAN DOMENICO (FI)
I. Description of Legal Basis

By a regulation of the Council of the European communities of 7 May 1990, the European Environment Agency was set up, after a prolonged discussion, with its seat in Copenhagen. It began working on 31 October 1994. Its task consists primarily in building a European information and observation network to put the Community and the Member States in a position to gather objective, reliable and readily comparable information as a basis for environment protection measures and their assessment, and provide technical and scientific support for environmentally relevant decisions and informing the public.

Its task is made more specific in Article 2: the agency (EEA) is to gather data on the state of the environment, analyse and use them to produce expert reports on the nature and intensity of burdens on the environment and develop uniform assessment criteria for the environmental data used, with a view to improving the implementation of European environmental law. It should also help to make the collection of environmental data uniform at European level, and where necessary harmonize measuring methods on this basis; this should promote consideration for European information in international environment monitoring programmes, development of forecasting and assessment methods and the exchange of information on the best available environmental technologies, as well as helping to develop methods for evaluating environmental damage and costs of protecting the environment. The European public is to be informed on the state of the environment every three years through an environmental report; the first has now been presented, in November 1995. By Article 3 of the regulation, the agency is to set priorities in its work; the criteria set for this are, however, couched very broadly, ranging from air and water pollution through refuse disposal to climate protection.

A striking feature of the structure and process of the EEA’s exercise of its functions is recourse to the network concept (Article 4), already repeatedly made in other European legal provisions to protect the environment and other complex public goods. The agency is not to operate like a German Anstalt (institution), an autonomous technical institution working on precise deadlines laid down by an “institutional director”, but to guarantee mutual linkage (in particular) with national central organizations for information-gathering and coordination and facilitate cooperation with sectoral centres to be formed in

1 Text translated by Iain L Fraser.
particular areas and in turn linked up on the basis of an agreement with the agency into a sort of specialized network among the bodies involved. On this basis, for instance, the German Federal Environment Office has been entrusted with the sector of air pollution; it works together with corresponding organizations in France and Britain. Establishment of the sectors is to be fleshed out in a multi-year programme of work, but in principle to be time limited.

This special construction is also reflected in the organizational structure: the agency, which has legal personality, has a management board consisting of Member State representatives, to draw up the multi-year working programme. The EEA is thus largely independent of the Commission, but closely associated with Member State administrations; the German representative is the Secretary of State in the Environment Ministry. The agency has an executive director appointed by the management board on proposal from the Commission. A scientific advisory committee has also been set up, participating in, for instance, selecting scientific staff. Article 20 contains a revision clause providing that the Council shall not later than two years after entry into force of the regulation decide, on the basis of a Commission report and proposals, on the adoption of further tasks, in particular monitoring the implementation of European environment legislation (in cooperation with the Commission and other bodies), issuing environment marks and developing criteria for conferring them on new environment-friendly products, commodities, technologies, services and resource-saving programmes, and also for assessing environmental compatibility in procedures corresponding with the European Community Directive adopted thereupon.4

II. The Position of the EEA in the EC's Institutional Structure

1. Organizational Competence of the EC

The revision clause points to the conflict there was over the structure of the agency. The European Parliament in particular had pressed for stressing its role in the process of applying and monitoring European environmental law.5

This proposal did not make it, but the problem has not been definitively dealt with. The clause itself however, seems scarcely convincing, since the basis for a decision can hardly have become much different after two years. And in fact, the Commission report has not yet been submitted.

Another basic problem was to answer the question whether the EEC Treaty at all contains an adequate empowerment basis for creating new European administrative entities, and what is more equipped with legal personality. The organizational competence for this is derived in the regulation from the provisions on the Community’s environmental competence. This organizational competence of the EC has not yet been the object of decision in ECJ case law on the EEC Treaty; however, the Court of Justice did have to deal with a corresponding question for the European Coal and Steel Community in the Meroni case, where it interpreted the organizational competence narrowly. It does seem doubtful whether the case law developed for the narrowly delimited task of the Coal and Steel Community can be transferred to the broader-based integrational constitution of the EEC. On the other hand, the fact that the agency has no powers of decision externally ought not to be decisive since the point here is not the constitutional one of empowerment to intervene in citizens’ rights, but the distribution of powers between national and supranational level. This question also arises in a federal State (cf., eg., Article 87 Basic Law) and is - irrespective of the question of the power to decide externally - been decided explicitly in the Federal Republic with certain restrictions, in favour of the federal level. Details need not be gone into here, since the special feature of the agency is precisely that, as indicated above, it is to be fitted into a network structure, that allows the Member States more influence than they would have under the alternative version of setting up an information and planning division within the Commission. At any rate, the creation of these organizations, based on a network model and not

---

6 Cf. Arts. 2,3 of the Regulations.
9 Approaches to this sort of network structure can also be found in other recent EC legal provisions, like the Council Directive of 25 February 1993 regulating support to the Commission by collaboration from Member States in the scientific verification of foodstuff questions (OJ N° L52, 4.3.1993, p.18-21); cf. also the Commission decision on the administrative organization of cooperation on the scientific verification of foodstuff questions (OJ N° L189, 23.7.1994, p. 84f); cf also C. Joerges, Scientific Expertise in Social Regulation and the European Court of Justice: Legal Frameworks for Denationalized Governance Structures, Robert Schuman Centre Working Paper, EUI, Florence 96/10, esp. p. 6.
institutionally, procedurally, or substantively increasing the weight of supranational bodies vis-à-vis the Member States, ought to be compatible with the distribution of powers in the Treaty. The difference becomes clear from the construction of the management board, controlled entirely by Member State representatives. This also shows that in the development of dogmatics in European Community law analogies to the constitutional law of federal States may be helpful, but that the peculiarities arising from the stronger position of Member States at Community level must always be taken into account.

2. Information or Inspection?

The European Parliament particularly criticized the lack of formal control and intervention possibilities vis-à-vis Member State administrations, and called for a sort of “environmental inspectorate”10. There is after all an example of this in the EC in the form of the Fisheries Inspectorate11, which can carry out checks on Member States even with effect against individuals. The same is true of breaches of competition12. But the difference from environmental administration is that it concerns preventing unilateral advantages by individual Member States at the expense of others, especially those that threaten agreed Community policy because of the necessary reciprocity of commitments undertaken. Moreover, the information relevant to decisions is often hard to get because the private individuals involved can shield their conduct from view and the disadvantage arises almost exclusively in other Member States, not in the one on whose territory the legal infringement is threatened or has occurred. But environmental law is an extremely complex legal area in which there is no comparable unambiguous interest structure; moreover, the interpenetration of special European and general national environment law (and beyond that, general administrative law) is in need of clarification13. Especially, the development of dogmatics oriented towards coordination of national and European environmental law would be desirable. But particularly in relatively

12 Bleckmann (Schneider), op. cit., (FN 10).
unambiguous cases of environmental infringements, the national interest ought either itself to be strongly affected, or else the lack of willingness for environment protection in a Member State (harming its own long-term interests) is more the expression of a general pressure of problems coming from other weaknesses, particularly economic but also administrative ones, which intervention from outside can circumvent, possibly sparking off defensive actions. Without a greater degree of cooperation, transparency and information on problems of implementing environmental law in Member States, an "Environmental Inspectorate" could scarcely work - as a comparative look at the problems of implementing national environmental law makes clear.

3. Europeanization of Environment Law and the Limits to the Administrative Law Regulatory Model

A further weighty argument has to be taken into account in assessing the construction of the EEA: in national environment law too, the administrative-law regulatory approach prevailing hitherto, based on detailed normative frameworks and corresponding control requirements, is increasingly coming up against its limits and being called into question by more flexible instruments of informal coordination, agreements, and incentives etc. In the face of complexity, the administration increasingly has to decide on a basis of uncertainty (of various types: empirical, methodical or theoretical)\(^\text{14}\), because the knowledge required for decision is becoming increasingly specialized and no longer automatically available to the authority. This also makes checks more difficult. The employment of informal instruments\(^\text{15}\) is coming about just because in the event of conflict the chances of a trial seem hard to reckon. Looked at from outside, that is, from a supranational decisional level, these implementation problems would likely be even harder to handle. Additionally, the associated problem of creating unintended negative effects is increasingly arising: particularly recourse to concealment measures or to the shifting of a problem from one subject area to another. This is particularly to be expected in an environment law. In relatively unambiguous cases of breaches of European environment law, the Commission has the procedure of applying to the ECJ

---


under Article 169 EEC available; and individuals and firms affected as third parties, or environment associations, can also be important guarantors of the implementation of European environment law, by initiating decisions of national courts.

On top of this problem of securing information on environment quality in a narrower sense comes the difficulty of assessing the strengths and weaknesses of the various administrative systems in which the limits of administrative law are reflected in specific forms in each case. This could make the intrinsic difficulties of the administrative-law model percolate through to checks on national administrations by the supranational European Community level. This is all the more so since the relatively small size of the European administration would in any case set narrow limits to systematic monitoring of national implementation and application of European law. This does not of course mean that in many cases European checks on national administration might not be entirely appropriate.

The possibilities of supranational intervention are, however, set in advance by the differing efficiency of national administrations. This reflects the particular complexity of environment administration: mostly the point will not be a simple alternative between application and non-application of European environment law. But this is what the approach to date, oriented on monitoring implementation, has pursued. It sees the trap of openly collusive or negligent versions of the ignoring of European law, which are certainly important in individual cases, even though scientific research on implementation has so far shown that it is more the limits to the adaptability of national administrations to European provisions (with the best of goodwill) that are decisive. In view of this position, it might very well prove fruitful for the European Environment Agency to limit itself primarily to handling information, and also to methodical and strategic problems, but not to be given any executive tasks.

Below we shall first take a comparative look at the EEA's similarities and differences with other national environment agencies, before going on to raise issues of cooperation in international treaty systems. This is important because the position of the European Community (and its administration) is located in intergovernmental and international organizational forms, while its peculiarity within an incomplete "transitional constitution" requires the drawing of

---

analyses to other forms of organization, but also conceptual innovation and adaptability on that basis\textsuperscript{17}.

**III. Comparative Considerations of Environment Agencies in the US, UK, and Germany**

1. The example of the American Environmental Protection Agency (EPA)

The best-known version of an environment agency is the US EPA\textsuperscript{18}. The organizational form, details of which cannot be gone into, has long differed from European administrative forms by the fact that alongside a multiplicity of administrative investigative procedures and individual decisions it has extensive powers of regulation that at least partially correspond to the European concept of delegated law-making, though without ultimately being bound in general in a comparable form by specific empowerments (cf. e.g. Article 80 of the Basic Law). The model of the American agencies is based primarily on the concept of the autonomy of technological knowledge as the basis for administrative action\textsuperscript{19}, that can no longer be oriented on a pragmatically-applicable concept of more or less manifest common interests of citizens. In Europe the statute as basis for legitimation, albeit in the form of a statutorily-defined empowerment for regulation, has been able to develop much greater flexibility.

Particularly in the last few years it has become apparent that this model of technocratic concentration of far-reaching regulatory empowerment is increasingly coming up against limits and facing the problem of the re-entry of social options into technically-oriented procedures. The various problems of uncertainty are, with the dissolution of stable, evenly-developing experience and the consensus on the development of technology it supported, increasingly emerging as an obstacle to consistent regulatory practice, with the consequence of overloading through self-blocking. This is reflected, for instance, in the development of contradictory rules of proof and evaluation. On the one hand, uncertainties of various forms become visible and increase the need for information, while on the other assessment methods themselves often become


so uncertain that one cannot get beyond the traditional liberal rule of presumption in favour of the freedom of action and decision of private persons, since the potential need for information has to be limited by stopping rules. The resulting dilemma can be shown by the fact alone that the EPA, for instance in chemicals control procedures (Toxic Substances Control Act, TSCA), has a relatively far-reaching possibility of imposing information obligations (tests etc) on the user (and can thus cause considerable costs), while as regards decision of the matter itself it ultimately remains more or less strongly bound by whatever rule of evidence may apply. In these circumstances it is no longer easy to see whether and to what extent increasing information duties at all helps to improve environment protection.

The dominance of technocratic components in the construction of the American EGA is logically reflected first in the fact that the US has refrained from forming a separate environment ministry, and Congress has consistently exercised only very broad task assignment and monitoring. In recent years this relatively uniform coherent concept has crumbled in many ways. These decisional problems can no longer be solved by technocratic knowledge alone is a fact that can no longer be ignored. This has led to a political vacuum that has been filled by a variety of heterogeneous, fragmented political elements, that cannot compensate for the lack of political control over environment-related regulations. Congress has tied Acts increasingly to time limits or comprehensive reporting requirements intended to enhance parliamentary control, but at the same time questioned the agency’s original conception without being able to put a new model in its place. The EPA has reacted to the overload and fragmentation of tasks most recently by various priority-setting.


approaches (to which we shall return). From the viewpoint of European Law the EPA, in view of the different administrative traditions in European countries, would not seem an example that could be taken over. In particular, the heavy stress on technocracy as the basis of legitimation for environment-related regulation seems with the evolution of technology and science to have lost much of its vigour. It is most notably the approaches to priority-setting in the EPA’s work developing in response to overloading that might be made use of in designing a European environment agency.

2. Britain’s Environmental Agency

In Britain too, an Environmental Agency has recently been created. Its special feature is that alongside information-related tasks it was supposed especially to guarantee a development of organizational and procedural rules suitable for the transition to “integrative pollution control”. The agency is supposed to help make data on environment pollution uniform for decisions on plant licensing. Article 5 (1) of the 1995 Act inter alia gives it relatively generally couched regulatory powers to prevent, avoid, eliminate and compensate for pollution and to collect information as the basis for the exercise of its own control and regulatory tasks and for environmental reporting purposes. It is also, at the request of the competent minister, to undertake environmental impact assessments, generally or specifically. The Agency has also to make comparative evaluations of different environment policy options and strategies. The special feature of the British agency is particularly that performance of its duties is linked to a requirement to do cost-benefit analyses. In Britain there has been a debate on including market elements in environment policy, which did not however ultimately lead to replacing traditional administrative instruments on any broad scale by new market forms of environment policy. At any rate, the stronger emphasis on cost-benefit analysis expresses a different conception of environment agency from the US: it is not, as the original American EPA concept was, marked by a technocratic conception of the environment problem, presumed to be homogeneous, that is autonomous vis-à-vis publicly defined policy, but seeks to lay down criteria and methods for handling decisional

---

26 Hancher, op. cit. (FN23, p. 13)
27 Hancher, op.cit., (FN 23, p. 13)
problems in conditions of complexity where there is a wealth of alternatives. In this case the legislator trusts particularly in more economically oriented forms of risk comparison and risk assessment, which are anyway built in to the environment law machinery as an additional component.

3. The German Federal Environmental Office

The German model of the Federal Environmental Office (UBA) differs from the British and the American versions of environment agency by the strong dominance of information tasks\(^{28}\). The UBA is to support the competent Federal minister scientifically on a multiplicity of environment policy questions, especially in developing legal and administrative provisions and designing the bases for environment measures and procedures. It also has extensive tasks in building up information systems on environment planning and documentation; and special acts (§2 (3), (4) UBAG) or administrative delegation on the basis of statutes also give it tasks of collaborating on individual decisions, particularly on procedures requiring a high degree of technical and scientific expertise (cf. e.g. § 16 (4) GenTG, in connection with decisions on liberating genetically engineered organisms). The UBA is also represented on various expert committees that draft administrative provisions or have general advisory duties.

The UBA’s organizational and procedural position is, by comparison with the American or British example, particularly marked by its having a rather marginal involvement in regulatory tasks in the narrow sense. This job is done mostly by the competent Federal minister, with the support of advisory bodies set up by him more on bases of political, scientific and economic pluralism (e.g. §§ 48, 52 BImSchG). The office as a Federal umbrella agency, has no legal personality of its own, and thus does not have the position of an “Agency” like the American EPA, largely independent of government\(^{29}\). One problem for the UBA’s position arises also from the fact that the Federal minister himself has a large administrative apparatus with appropriate expertise (which is not the case in the USA, for instance). A further peculiarity is that the Federal government has only minor powers in the area of environment administration and is thus largely confined to environment legislation, including the setting of

\(^{28}\) UBAG, 22.7.1974 (BGBl I 1505), last amended by Act of 24.6.1994 (BGBl I 11416); on its work, see most recently the UBA report for 1994, esp. p. 8.

\(^{29}\) This must however be qualified to the extent that the EPA has an only partly independent position. While it is not subject to instructions from the President, he has the right to dismiss its head. Additionally, the President expresses “wishes” on intended regulations, the legitimacy of which is constitutionally controversial, particularly in the case of formalized regulatory procedures.
administrative provisions. The actual administrative tasks are mainly for the Länder. The UBA’s assessment tasks are limited accordingly.

4. Comparative Considerations

In the light of the themes we are pursuing here, for this very reason a comparison between the European model of the EEA and the German UBA might suggest itself. On second thoughts, though, this can be seen to be rather deceptive: the political autonomy of the Länder is far less marked than that of individual EU Member States. This is reflected particularly in the differing legal dogmatic and administrative traditions. The German Federal State is marked instead by close coordination which has harmonizing effects as against the administrative and legal separations. It is not without reason that K. Hesse has spoken about development towards a “unitary Federal state”\textsuperscript{30}. For the EC’s further development it is more new types of loose procedural forms of coordination and cooperation, able to change with the times, that are needed, in environment policy too\textsuperscript{31}. Here the German model of the UBA, because of the strong political dominance of the ministry administration on the one hand and the administrative dominance of the Länder on the other, has probably less to contribute than the American or British model. This is confirmed by the fact that the very aspect of the American EPA that might offer suggestions for further development of the EEA has to do less with the fact that the US is federal than with development of a strategy to make technocratic knowledge independent as the basis for environment-related decisions. It is also relevant on the other hand that the Commission has less material and staff capacity to formulate environmental policy than the German Federal minister - another point of likeness with the US. There is a parallel, also, because given that political control over the American EPA is less developed than in the German system, there is much greater concentration on the central position of the law and an associated conception of ministerial responsibility, leaving less legitimation for administrative discretion.

Summarizing, it may be said that the American, British and German models offer three different versions of the structure of an environment agency that the development of the European model could partly imitate, and partly distinguish itself from. In the last analysis, though, the German version offers little political room for manoeuvre, and the American one is in a transitional phase, because its technocratic conception has come up against its limits, while the British one, about which not much can yet be said for lack of practical experience, is

\begin{footnotes}
\item[31] Cf. in general Ladeur, \textit{op. cit.} (FN 16).
\end{footnotes}
looking for a new approach differing from technocratical strategies by setting priorities according to economic cost-benefit analysis. It can be shown that the EEA must in many respects differ from national models; at least this should have emerged from our brief comparison. Its special feature is the network construction mentioned. On the other hand, the guidance problems of national environmental agencies existing in the European States and the US must also be taken account of in further strategic development of the EEA. Some views on this will be outlined below.

IV. New Forms of Cooperation in Networks

In the legal and political academic literature on international relations, the view has increasingly taken shape in recent years that the dynamics of international treaties and the creation of international and supranational organizations based on them can only very inadequately be seen as located between the poles of State sovereignty on the one hand and bipolar or multipolar treaty links on the other. Instead, new forms of lasting association of the agents involved can be noted that develop a network of relationships that in turn produces overlapping dynamic linkage effects. This effect, which separates and becomes autonomous from the agreed will laid down in treaties, can be summed up in the term "regime". On a widespread definition, the regime is a stock of "implicit or explicit principles, standards, rules and decisional procedures on which the expectations of actors in a given field of international relations converge".32

Even if the EC has the nature of a supranational organization, this changes nothing in the fact that its organizational structure too is in part more like an open, heterarchical, dynamic form of cooperation and coordination, not in line with the traditional conception of the division of superordination and subordination relations and relatively precise stratification of tasks developed in the analysis of States33. This is perhaps the explanation for the need to develop common legal dogmatics, or a new model of coordination of differing dogmatics using a "conflict of laws" doctrine, which goes beyond the implementation of individual norms34. If these dynamic coordination effects are

---

taken more account of as normatively relevant relationships that create expectations and conventions, a new perspective can be developed for European administrative law in general and environment law in particular, which could also be useful for defining the position of the EEA. From this viewpoint the question of the independency of agencies can be put differently: if and insofar as the hierarchical model of control, even in its democratic version, can no longer make any monopoly claim, other forms for guaranteeing transparency and responsibility vis-à-vis central bodies must be thought up.

It is, moreover, interesting that this same hierarchical model is also increasingly coming up against limits within the State’s sphere itself, because the horizontal and vertical stratification of tasks is now supplemented and made permeable by the formation of dynamic networks of relationships among non-hierarchically linked administrative bodies, focused on variable task performance, going beyond the hitherto known forms of occasional cooperation among Länder (in the Federal State) and municipalities. This new form of administrative cooperation is distinguished, within the State too, just because this network behaviour creates a “synergetic surplus” that points beyond traditional forms of agreements and coordination, without thereby creating a new “dominant subject”, as was similarly possible in the classical form of the special association. Networks differ just because they are based on coordinating differing actors with differing efficiencies and open expectations, while at the same time neither the overall effect of the links that arise nor the mutual advantages and disadvantages for those involved can be estimated exactly. This is all the more true since the dynamics of cooperation are supposed to produce an extra-productive effect of innovation. Accordingly, a network is not to be equated with anarchy any more than is the international regime. For its functional capacity, the role of a “stimulator and stabilizer” may be very


38 Ritter, op. cit., (FN 36), 396.
important\(^{39}\). This sort of role could be the EEA’s too, say in the area of European environment policy, as long as it stabilizes cooperation in particular forms, supports and facilitates network-performing behaviour, and thus in general stresses a synergetic effect within a strengthening network. This would be all the more important for the EEA because its rather slight resources mean that there can from the outset be no overevaluation of its existing autonomous powers of action. If these network effects among the national organizations participating can be stabilized, the danger of the agency’s being gridlocked by the heavy influence of national ministry administrations on the management board will also be limited\(^{40}\).

It follows from these considerations that the EEA could be seen as an example of a new type of network administration, the forms of which have frequently been described in both international and national contexts in recent years, and could also give new stimuli to the EC conception. It emerges, thus, that especially the waiving of executive control powers in determining the EEA’s tasks is fully in line with a new model administration that can cope with the openness and complexity of the task and the need involved to produce innovation through cooperation.

While so far it is more the structure of the EEA we have been concentrating on, we shall look more closely below at how it can substantively and procedurally help to fertilize the development of environment law and environment policy in Europe through new impulses. To the fore will be the consideration of whether and how far a new European institution might be used to learn from the weaknesses of the existing, mainly administratively conceived environment law.

V. The Need for Priority Setting in Environment Law and Policy

1. Complexity as a Challenge

One of the EEA’s most urgent tasks is certainly to develop data collection systems and measuring programmes to guarantee the comparability of the empirical basis of environment policy in Member States and in the EC. In this respect there are in part sizeable differences, as regards both the quantity of data

\(^{39}\) Ritter, *op. cit.*, (FN 36), 401.

and the procedure for describing and assessing them. The agency also has publicity duties, met in 1995 by presenting its first comprehensive report. This gives a very clear survey of pollution in Europe but also shows the gaps in information, particularly about the environmental position in Central and Eastern Europe. There is an impressive list of informants that have contributed to the report. The EEA’s real administrative task, however, must lie more in an area between the performing of clearly defined task (measuring air pollution from particular substances) and the overall description of the state of the environment. It is clear that generally-worded reports, even if they also formulate administrative tasks, ultimately contain much too highly-aggregated descriptions to be able to give the outlines for a decision-oriented environment strategy. The existing administrative and legislative decisional procedures are based on the assumption that alternatives are readily describable and the normative framework for decision correspondingly stable within particular degrees of fluctuation from the mean. Especially the causality model that reckons with the natural stratification of complexity levels and makes relatively simple cause-effect attributions on this basis was an essential part of the rational decision model. Today’s environmental administration must instead operate with poorly-structured complexity. This means that not only have the scientific and decisional problems become more complicated, but especially that the hierarchical division of general and particular that could previously be assumed, especially the allocation of effects to causes, the durable establishment of private rights and public legal goods, and the limits to individual action and resulting possibility of one-off decision by an individual administrative body, based on the concept of hazard supported by experience, provided limitations that are now being broken through on all quarters. In particular, it becomes clear in retrospect that the basis for risk decisions in the past lay in trust in the institutions. This trust made possible the coordination of knowledge, of values and of decisional rules; its breakdown cannot be compensated for by unilaterally emphasizing the knowledge aspect (experts).

Expert knowledge can be only artificially separated from social and organizational dimensions, so that scientific risk definitions are dependent on

44 Hyman/Stiftel, op. cit., (FN 41).
pre-existing "framing"\textsuperscript{47}. Making a contribution towards a redefinition of this framing would be an important task for the EEA. The complexity of these tasks does not however conversely allow predecision on a new hierarchy of values on the basis of which a return could be made to a strategy of individual decisions on a stable normative basis.

The blending of empirical, methodological, scientific and theoretical components of decision under uncertainty with normative, procedural and organizational components and their linkage with various time frames cannot be lastingly circumvented. A promising strategy can consist only in opening up the traditional descriptive, analytical decision on a stable normative basis in such a way as to give it a learning capacity and make it permeable for adaptive, evolutionary procedural models of a logic of experimental relating of differing viewpoints, oriented to self-change and self-observation. No ready-made procedure can be indicated for this either\textsuperscript{48}; from administrative viewpoints the point is particularly to develop risk management strategies that bring together the existing decisional components\textsuperscript{49}. This means, first, that even the earlier assumption that inaction as compliance with the safety limit more or less had the presumption of safety on its side from the outset is no longer acceptable. If no clear attributions on the basis of a reality seen as uniform and describable by experience are available any longer, the sharp distinction between action (changing an assumed equilibrium position) and non-action (= not disturbing this sort of equilibrium) is no longer a reliable starting point. Not taking a risky action can, in a disequilibrium model oriented to immanent self-change, lead to much greater risks than doing it: genetically engineered plants may produce a risk, but possibly the risk of doing without genetic engineering is, in view of present and future climatic changes, even greater.

2. More Flexible Technology - more Flexible Decision

Even if there can be no unambiguous technical and legal solutions to the new problems, it is nonetheless to be recognized that there are new technological


procedures able to process a multiplicity of information that previously could not be coped with, even including incomplete knowledge. Thus while on the one hand existing risk assessment based on describing individual events has come up against its limits, on the other expert systems are conceivable that make it possible using computer programmes to learn from rapidly changing experience by event analysis and comparative modelling on the basis of a multiplicity of occurrences.

In particular, the large number of occurrence reports arising in complex high-technology plants (especially nuclear power stations) are on experts' views reasonably interpretable only using computers. Particularly when the possibilities of including flexibility and calculation of alternatives in technical programmes are taken into account, it becomes conceivable to link uncertainty not just with the alternative between inaction and action despite uncertainty, but to process alternatives, and conceive intermediate decisions oriented towards expanding knowledge, that is, to combine knowledge and decision flexibly with each other.

On the other hand, technology too has become more flexible today, so that here too more openness to the inclusion of complex procedures for self-change on the basis of experience can be assumed. In the US, as already indicated, various approaches to priority setting in environment law and policy have been undertaken but have certainly not led, nor will lead, to the formulation of an unambiguous preference rule. For several years the insight has been spreading that the existing form of regulation of environmental hazards not only neglected particular aspects but at the same time overevaluated others, or did not adequately cope with them. The problematic consequence of this development is that it may also mean giving wrong signals for environment research and lines of innovation to pursue. The change in environment risks, which in factual terms have more and more to do with diffuse, not very structured,

---

54 Ackerman/Stewart, *op. cit.* (FN 52).
complex linkages of effects and uncertainties of description, and in administrative terms a corresponding difficulty in grasping the decisional position, is facing the State and especially the administration with quite new strategic challenges: the questioning of traditional normative indicators for risk avoidance (subjective rights and public legal goods) and the reliability of empirical knowledge rule out a procedure of merely quantitative multiplication of risks to be dealt with or of shifting the “danger limits” downwards. Thinking in networks of relations on the side of description of the environment must inevitably also be reflected in a move from an administrative model of one-off decision to avoid hazards seen as border-crossing, to a coordinated model of linkage into a variable network, oriented towards self-change, of flexible decisions operating with uncertainty. This must be directed towards accumulating learning effects and thus above all seek to portray dynamic interactions among partial knowledge, hypotheses about future developments, fragmentary public decisions, private and public innovations etc, in the form of modellings. The prerequisite for this is a different form of cooperation between science and administration: the failings of environment law to date cannot be compensated for by better scientific understanding. Instead, a regulatory strategy has to be formulated that develops an interactive, evolutionary methodology of cooperation with experts, and no longer seeks to cover up uncertainties, but to operate with them productively and link the checking of and search for new knowledge with decision. The environment administration must be given more freedom to set priorities and at the same time develop procedures for systematic observation and assessment of decisions to be treated as provisional. Here it is the best available knowledge that has to be used, but the need to decide fast has also to be recognized.

3. The EEA and the Development of Strategic Decision Models

The present debate in the USA is dominated by the call to introduce risk comparisons and the setting of strategic priority decisions, as well as for better coordination among the various administrations. The attempt is consistently made to define new “environment indicators” or “ecological targets” to replace


56 Ottway/v.Winterfeldt, op. cit., (FN 46); Keeney/v.Winterfeldt, op. cit., (FN 46)
the old, narrowly limited, rights or legal goods attributed to the individual or the State\textsuperscript{57}. In Europe, particularly in the Netherlands, a planning/cooperative element had been built into environment policy for some years now\textsuperscript{58}, similarly aimed at adding something to the old empirically-based practices and especially at promoting the coordination of public and private decision-makers. The need here is to specify the environmental requirements on industry better, design them on a longer-term basis and attune them better to private possibilities of action so that more effective cost-benefit strategies can be formulated. Details need not be gone into in the framework adopted here. From the European angle, the need may be primarily to stress the possibilities of building up a network of national environment agencies and authorities contained in the EEA conception, and orient the role definition of the new European institution on that. Linking up to the various national agents involved and the European agency itself offers approaches towards a productive dynamic of developing a flexible, strategic policy on environmental law, involving not just informal cooperation, but using the room for experimentation contained in the network construction to develop strategies and set priorities. At the same time, the differing competences, legal bases and administrative traditions of national agencies could be used as the basis for mutual monitoring (of one agency by another), especially in implementing varied action strategies arranged to harmonize with each other. Correspondingly, the lack of unity associated with the network conception could be turned to advantage in an experimentally-oriented strategic model. The differing priorities among the various countries could also be taken more account of by testing various strategies alongside each other and comparatively assessing them. The EEA ought here to concentrate on developing complex methods of risk comparison, building up interactive priority-setting systems and cooperative procedures among science, administration and policy, exploiting the advantages of the network model both procedurally and in formulating objectives. The attempt should also be made to conceive new forms of transnational harmonization of legal dogmatics, enabling learning by comparison of national decisional procedures on the basis of European regulations (e.g. EIA procedures).

\textsuperscript{57} Harwell et al., \textit{op. cit.}, (FN 49).
VI. Summary

The above considerations should have shown that the disputes around the creation of the EEA have at least in part set up false fronts by setting the questions of power to create new institutions and the allocation of decisional possibilities in the foreground. Particularly inclusion of the EEA in a network of national agencies offers promising possibilities for developing more complex decisional strategies, for priority setting and for transnational coordination.
EUI Working Papers are published and distributed by the European University Institute, Florence

Copies can be obtained free of charge – depending on the availability of stocks – from:

The Publications Officer
European University Institute
Badia Fiesolana
I-50016 San Domenico di Fiesole (FI)
Italy

Please use order form overleaf
Publications of the European University Institute

To
The Publications Officer
European University Institute
Badia Fiesolana
I-50016 San Domenico di Fiesole (FI) – Italy
Telefax No: +39/55/4685 636
E-mail: publish@datacomm.iue.it

From
Name .........................................................
Address .........................................................
.........................................................
.........................................................
.........................................................

☐ Please send me a complete list of EUI Working Papers
☐ Please send me a complete list of EUI book publications
☐ Please send me the EUI brochure Academic Year 1997/98

Please send me the following EUI Working Paper(s):

No, Author ........................................................
Title: ...........................................................................
No, Author ........................................................
Title: ...........................................................................
No, Author ........................................................
Title: ...........................................................................
No, Author ........................................................
Title: ...........................................................................

Date ........................................................
Signature .........................................................

© The Author(s). European University Institute.
Working Papers of the Robert Schuman Centre

RSC No. 94/1
Fritz W. SCHARPF
Community and Autonomy Multilevel Policy-Making in the European Union *

RSC No. 94/2
Paul McALEAVEY
The Political Logic of the European Community Structural Funds Budget: Lobbying Efforts by Declining Industrial Regions *

RSC No. 94/3
Toshihiro HORIUCHI
Japanese Public Policy for Cooperative Supply of Credit Guarantee to Small Firms - Its Evolution Since the Post War and Banks' Commitment

RSC No. 94/4
Thomas CHRISTIANSEN
European Integration Between Political Science and International Relations Theory: The End of Sovereignty *

RSC No. 94/5
Stefaan DE RYNCK
The Europeanization of Regional Development Policies in the Flemish Region

RSC No. 94/6
Enrique ALBEROLA ILA
Convergence Bands: A Proposal to Reform the EMS in the Transition to a Common Currency

RSC No. 94/7
Rosalyn HIGGINS
The EC and the New United Nations

RSC No. 94/8
Sidney TARROW
Social Movements in Europe: Movement Society or Europeanization of Conflict?

RSC No. 94/9
Vojin DIMITRIJEVIC
The 1974 Constitution as a Factor in the Collapse of Yugoslavia or as a Sign of Decaying Totalitarianism

RSC No. 94/10
Susan STRANGE
European Business in Japan: A Policy Crossroads?

RSC No. 94/11
Milica UVALIC
Privatization in Disintegrating East European States: The Case of Former Yugoslavia

RSC No. 94/12
Alberto CHILOSI
Property and Management Privatization in Eastern European Transition: Economic Consequences of Alternative Privatization Processes

RSC No. 94/13
Richard SINNOTT
Integration Theory, Subsidiarity and the Internationalisation of Issues: The Implications for Legitimacy *

RSC No. 94/14
Simon JOHNSON/Heidi KROLL
Complementarities, Managers and Mass Privatization Programs after Communism

RSC No. 94/15
Renzo DAVIDDI
Privatization in the Transition to a Market Economy

RSC No. 94/16
Alberto BACCINI
Industrial Organization and the Financing of Small Firms: The Case of MagneTek

RSC No. 94/17
Jonathan GOLUB
The Pivotal Role of British Sovereignty in EC Environmental Policy

RSC No. 94/18
Peter Viggo JAKOBSEN
Multilateralism Matters but How? The Impact of Multilateralism on Great Power Policy Towards the Break-up of Yugoslavia

* out of print
RSC No. 94/19
Andrea BOSCO
A 'Federator' for Europe: Altiero Spinelli and the Constituent Role of the European Parliament

RSC No. 94/20
Johnny LAURSEN
Blueprints of Nordic Integration. Dynamics and Institutions in Nordic Cooperation, 1945-72

RSC No. 95/1
Giandomenico MAJONE
Mutual Trust, Credible Commitments and the Evolution of Rules for a Single European Market

RSC No. 95/2
Ute COLLIER
Electricity Privatisation and Environmental Policy in the UK: Some Lessons for the Rest of Europe

RSC No. 95/3
Giuliana GEMELLI
American Influence on European Management Education: The Role of the Ford Foundation

RSC No. 95/4
Renaud DEHOUSSE
Institutional Reform in the European Community: Are there Alternatives to the Majoritarian Avenue? *

RSC No. 95/5
Vivien A. SCHMIDT
The New World Order, Incorporated: The Rise of Business and the Decline of the Nation-State

RSC No. 95/6
Liesbet HOOGHE
Subnational Mobilisation in the European Union

RSC No. 95/7
Gary MARKS/Liesbet HOOGHE/Kermit BLANK
European Integration and the State *

RSC No. 95/8
Sonia LUCARELLI
The International Community and the Yugoslav Crisis: A Chronology of Events *

RSC No. 95/9

RSC No. 95/10
Martin RHODES
'Subversive Liberalism': Market Integration, Globalisation and the European Welfare State

RSC No. 95/11
Joseph H.H. WEILER/ Ulrich HALTERN/ Franz MAYER
European Democracy and its Critique - Five Uneasy Pieces

RSC No. 95/12
Richard ROSE/Christian HAERPFER
Democracy and Enlarging the European Union Eastward

RSC No. 95/13
Donatella DELLA PORTA
Social Movements and the State: Thoughts on the Policing of Protest

RSC No. 95/14
Patrick A. MC CARThY/Aris Alexopoulos
Theory Synthesis in IR - Problems & Possibilities

RSC No. 95/15
Denise R. OSBORN
Crime and the UK Economy

RSC No. 95/16
Jérôme HENRY/Jens WEIDMANN
The French-German Interest Rate Differential since German Unification: The Impact of the 1992-1993 EMS Crises

RSC No. 95/17
Giorgia GIOVANNEtti/Ramon MARIMON
A Monetary Union for a Heterogeneous Europe

RSC No. 95/18
Bernhard WINKLER
Towards a Strategic View on EMU - A Critical Survey

*out of print
RSC No. 95/19
Joseph H.H. WEILER
The State “liber ailes”
Demos, Telos and the German Maastricht Decision

RSC No. 95/20
Marc E. SMYRL
From Regional Policy Communities to European Networks: Inter-regional Divergence in the Implementation of EC Regional Policy in France

RSC No. 95/21
Claus-Dieter EHLERMANN
Increased Differentiation or Stronger Uniformity

RSC No. 95/22
Emile NOËL
La conférence intergouvernementale de 1996 Vers un nouvel ordre institutionnel

RSC No. 95/23
Jo SHAW
European Union Legal Studies in Crisis? Towards a New Dynamic

RSC No. 95/24
Hervé BRIBOSIA
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Report on Belgium

RSC No. 95/25
Juliane KOKOTT
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Report on Germany

RSC No. 95/26
Monica CLAES/Bruno DE WITTE
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Report on the Netherlands

RSC No. 95/27
Karen ALTER
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Explaining National Court Acceptance of European Court Jurisprudence: A Critical Evaluation of Theories of Legal Integration

RSC No. 95/28
Jens PLÖTNER
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Report on France

RSC No. 95/29
P.P. CRAIG
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Report on the United Kingdom

RSC No. 95/30
Francesco P. RUGGERI LADERCHI
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Report on Italy

RSC No. 95/31
Henri ETIENNE
The European Court and National Courts - Doctrine and Jurisprudence: Legal Change in its Social Context Report on Luxembourg

RSC No. 95/32
Philippe A. WEBER-PANARIELLO
The Integration of Matters of Justice and Home Affairs into Title VI of the Treaty on European Union: A Step Towards more Democracy?

RSC No. 95/33
Debra MATIER
Data, Information, Evidence and Rhetoric in the Environmental Policy Process: The Case of Solid Waste Management

RSC No. 95/34
Michael J. ARTIS
Currency Substitution in European Financial Markets

RSC No. 95/35
Christopher TAYLOR
Exchange Rate Arrangements for a Multi-Speed Europe

RSC No. 95/36
Iver B. NEUMANN
Collective Identity Formation: Self and Other in International Relations

*out of print*
RSC No. 95/37
Sonia LUCARELLI
The European Response to the Yugoslav Crisis: Story of a Two-Level Constraint

RSC No. 95/38
Alec STONE SWEET
Constitutional Dialogues in the European Community

RSC No. 95/39
Thomas GEHRING
Integrating Integration Theory: Neofunctionalism and International Regimes

RSC No. 95/40
David COBHAM
The UK’s Search for a Monetary Policy: In and Out of the ERM

RSC No. 96/1
Ute COLLIER
Implementing a Climate Change Strategy in the European Union: Obstacles and Opportunities

RSC No. 96/2
Jonathan GOLUB
Sovereignty and Subsidiarity in EU Environmental Policy

RSC No. 96/3
Jonathan GOLUB
State Power and Institutional Influence in European Integration: Lessons from the Packaging Waste Directive

RSC No. 96/4
Renaud DEHOUSSE
Intégration ou désintégration? Cinq thèses sur l’incidence de l’intégration européenne sur les structures étatiques

RSC No. 96/5
Jens RASMUSSEN

RSC No. 96/6
Olivier GODARD

RSC No. 96/7
Robert HANKIN
Integrating Scientific Expertise into Regulatory Decision-Making. The Cases of Food and Pharmaceuticals

RSC No. 96/8
Ernesto PREVIDI
Integrating Scientific Expertise into Regulatory Decision-Making. L’organisation des responsabilités publiques et privées dans la régulation européenne des risques: un vide institutionnel entre les deux?

RSC No. 96/9
Josef FALKE
Integrating Scientific Expertise into Regulatory Decision-Making. The Role of Non-governmental Standardization Organizations in the Regulation of Risks to Health and the Environment

RSC No. 96/10
Christian JOERGES

RSC No. 96/11
Martin SHAPIRO
Integrating Scientific Expertise into Regulatory Decision-Making. The Frontiers of Science Doctrine: American Experiences with the Judicial Control of Science-Based Decision-Making

RSC No. 96/12
Gianna BOERO/Giuseppe TULLIO
Currency Substitution and the Stability of the German Demand for Money Function Before and After the Fall of the Berlin Wall

*out of print