COMPARATIVE REMARKS

René Seerden Michiel Heldeweg Kurt Deketelaere

1 INTRODUCTION

In this chapter some comparative remarks will be made on the basis of the contributions in the previous chapters. The reason for making these remarks is to give more insight into the main developments in public environmental law in the European Union, the EU Member States and the United States of America, and to determine whether these developments are in tune with one another or whether they are clearly divergent. It would, of course, be most interesting to discuss the backgrounds of possible common practices and indeed of differences in the legal approach to (certain) environmental problems. As already mentioned in the introductory remarks to this book, it is not the purpose of this comparative chapter to make an extensive analysis of all the possible similarities and differences in the field of public environmental law of the various EU Member States, the USA and at the level of the EU. In the first place, we think that it is almost impossible for anybody to give such an overall analysis. To fully understand the public environmental law of a country it is absolutely necessary to have full information and knowledge about the historical, political, social and economical context in which this system of environmental law is incorporated. It is not easy to have this information and knowledge for one's own legal system, let alone for more than fifteen legal systems. So we leave the 'real comparison' to the readers of this book. They can make their 'in depth' comparisons on those topics they are most interested and specialised in. Secondly, as is also indicated in the introductory remarks, this book is meant as a stepping stone for subsequent discussions and further writings. At this moment we do not want to give this process of further and deeper elaboration too strong a direction by overemphasizing the comparative aspects. A third reason for the absence of detailed comparison is that, although we tried to create reasonably compatible contributions by giving the framework and making comments on the draft contributions, this compatibility has not always been achieved. Of course, this is logical in the light of the fact that we are dealing with many countries, many authors with different backgrounds, different approaches, different timetables, et cetera. Further study of legislation, case law and the comments and proposals by academic writers would be necessary. This clearly goes beyond the scope of this book, which is meant as an introductory step towards one or more of those studies.

The main question here will be whether it can be said that we are witnessing the rise of a ius commune in environmental law. This seems especially relevant to the EU, but in this day and age of 'globalisation' also in relation to the USA. We will only make some summarizing comparative remarks (by pointing out the most remarkable similarities and discrepancies) related to the most central items of public environmental law that are addressed in the various contributions. Thereby we hope to shed some light on the main trends. In the following paragraphs, the framework for the contributions will also be the framework for making these comparative remarks. In this respect, the enumeration of countries (whether or not between brackets) in the comparative remarks is merely intended as an illustration and is not necessarily meant to be exhaustive.

2 COMPARATIVE REMARKS

2.1 THE CONSTITUTIONAL LEGAL SYSTEM

The cornerstones of the EU, each EU Member State and of the USA are the ideals of democracy, the rule of law, respect for human rights and judicial review. In all countries these ideals have been laid down in a written 'constitution', except in the United Kingdom were these ideals are rooted in actual constitutional practice and in common law. The exact ways in which democracy, the rule of law, respect for human rights and judicial review are upheld can differ in many ways. All countries apply the model of a representative democracy as the basis for the legislative process. An important point of difference is that in some countries the 'sovereignty of parliament' rules out judicial control of legislation - for instance in Denmark, the United Kingdom and the Netherlands - whereas in other cases - for instance in Austria, Belgium, Germany, Ireland, Italy and Spain, as well as in the USA - there is room for judicial control of legislation through a constitutional court. The existence of a 'constitutional court' is in some cases - such as Austria, Belgium, Germany and the USA - linked to a more federal state structure - the constitutional court serves as a remedy against the usurpation of power by central government and also as a safeguard that decentralised legislative authorities will comply with constitutional arrangements and general legal principles. Of course in addition other (administrative) courts exist.

In all countries there is some form of 'decentralization' although there is a considerable difference in the amount of legislative (and executive) powers bestowed upon decentralised authorities. In the case of Denmark, Ireland and France, for instance, the contributions make it clear that central government (re)dominates. In other cases, like the United Kingdom and the Netherlands, central government guidelines seem to play an important role in that decentralised authorities have to take account of these guidelines.

As far as the 'executive' branch of government is concerned there is democratic control by bodies of representatives and in addition in many cases executive decisions can only be taken on the basis of a procedure which offers the opportunity for public participation. What is also interesting to note is that in many countries there are functional and to

some degree independent administrative authorities that play an important regulatory part - for instance in Ireland where the Environmental Protection Agency (EPA) issues licences. The EPA in the USA is the primary regulator for pollution, through regulations based on statutes on air- and waterpollution, and on waste-disposal and toxic substances. It also enforces environmental standards and supervises states. Some other contributions also mention similar institutions, though mainly with advisory or supervisory tasks. Finally it should be mentioned here that the EU-EPA (in Kopenhagen) is not an authority that carries competencies to enter into legislation or enforcement of environmental regulations, like the USA-EPA, but rather an institute in the field of environmental information. By the way the 'collecting' of environmental data and its analyzing is something that has just become but may in the future be the very instrument to really compare 'the state of the environment' in various countries.

One of the interesting questions under the heading of the constitutional framework, next to matters of substantive and procedural environmental law, is whether in the allocation of environmental competencies there is a trend towards more centralised public environmental law; particularly in the EU, under the influence of EU-directives, there is a need for technical expertise in environmental regulation and the need to avoid economic disparities. Although in some EU Member States environmental regulation is - as was stated above - a centralised affair, decentralised authorities still seem to play an important role, like for instance in the Netherlands, in Italy and in Finland, although it is not always clear whether these authorities have much discretion in the matter of their competencies (that seem rather of an executive than legislative nature). In this regard an interesting question remains how to deal with the EU Member States responsibility for the proper implementation of EC-directives, even if (effective!) implementation is for some (greater or smaller) part a matter that depends on the actions of decentralized authorities. In the relation between the EU and the EU Member States of course the subsidiarity-principle should be abided: if a(n environmental) matter can be properly taken care of on the member state level, it is preferred that the Union stays out of it. Generally speaking the EU environmental policy can be regarded as an engine that brings the national legislative powers into action (as with the IPPC-directive). As far as the USA is concerned decentralization is embedded in the federal structure of the Union. The constitution limits the federal powers and leaves the remaining powers to the states (and the people). The stateadministration mirrors the federal system. Within each state there is local government on the basis of state-law which, unlike the federation and the states, is not bestowed with any 'sovereign powers'. Local government (still) plays an important role in implementing environmental policies.

Finally it should be mentioned that federal systems, like Germany, Belgium, Italy, the USA and - setting aside the present debate on this - the EU, can, regardless of their common title, still differ considerably when it comes to the internal allocation of environmental competencies. Within the USA at the federal level the substantive competencies often are limited to setting minimum-standards (like in the EU), but on a state level supplementary regulation is possible. In Germany in a limited number of matters the federal level has exclusive powers - so the states have no say at all. On the other hand, for instance, in Belgium the state-regions carry the most important environmental powers and furthermore regional legislation is of equal stature as national/federal legislation (clearly different than in Germany of Italy). This may lead to less fragmented approaches. The fact

that in Belgium unlike for instance in the USA the court system is not regionalised, may also lead to a more unifom application of environmental law.

Although the EU might be heading towards a federal structure like the USA at present this is not the case due to the weaker role of the European Parliament, the fact that European legislation is mainly implemented and enforced by the Member States and not EU institutions, (therefore) the very restricted access to the European Court of Justice of individuals etc.

2.2 LEGAL BASIS

In some EU Member States, such as Belgium, Finland, Austria, the Netherlands, Germany and Spain, there is a clear basis for environmental regulation in the written constitution. In those countries this constitutional provision can be regarded as imposing a duty on the state (i.e. the governmental bodies of the state) to take regulatory action to protect and improve the environment. As far as could be deduced from the contributions, there does not seem to be an opportunity in any of these countries for individuals or groups of citizens to start a judicial action against a government authority in order to have this authority take regulatory action to benefit the environment. Thus it seems that the constitutional duty to protect and improve the environment is primarily (if not exclusively) a basic social right. Yet the contributions from Austria and the Netherlands seem to suggest that there might be a claim for citizens if the government, for instance through deregulation, drastically lowered the level of environmental protection.

It is also interesting to see that other constitutional provisions can have a great influence on how government is expected to weigh the environmental interest. Some authors, for instance from Austria and Italy, mention basic property rights that can stand in the way of government intervention on behalf of the environment - entailing at least the duty to fully compensate breaches of property rights. By contrast, some contributions, as for instance in the case of Italy, point to constitutionally protected rights like the protection of the natural heritage and the protection of health. It is in an extension to these rights that some governments find a title for environmental regulation.

It goes without saying that courts can play an important role in interpreting and indeed in laying down an environmental basic right. In Ireland, for example, in the case of Ryan v. Attorney General the Constitutional Court held that every citizen has a right to bodily integrity and this principle was subsequently extended by the High Court to condemn an act or 'omission' of the executive which, without justification, would expose the health of a person to risk or danger.

As far as the EU is concerned article 2 EC Treaty lays the foundation for an environmental policy by pointing to, amongst others, a high level of protection and improvement of the quality of the environment. In terms furthering this policy by legislation the articles 95 and 175 EC provide a regulatory basis. Article 95 does so in the context of promoting the internal market through adopting legislation with a high level of environmental protection. Article 175 on the other hand offers a truly environmental basis, related to the obligation of the community, as stated in article 174 EC, to contribute to the pursuit of preserving, protecting and improving the quality of the environment, protecting human health, prudent and rational utilisation of natural resources and promoting measures at international level to deal with regional or world-wide environmental problems. The

central aim of creating an internal market, free of hurdles to the 'free movement of goods', has lead to continuously weighing the aspired environmental protection against this aim, and also to a recourse to article 95 as a legal basis, even if environmental interests are at stake. Two legal bases for environmental oriented measures is somewhat strange, especially when procures to come to EC legislative measures may differ and also the possibilities for Member States to derogate from EC legislation (to come to further going environmental protection) is dealt with in a different way (article 95 sections 4 onwards versus article 176 EC Treaty). As to the latter, these may be less apparent today than 10 years ago and in the end it maybe just decided by the European Court of Justice in the framework of 'proportionality'. Another recent example of the importance of environmental protection is laid down in article 37 of the EU Charter on Human Rights, in which it is stated that a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sutainable development.

In the USA historically environmental law is rooted in doctrines of nuisance and trespass (with pollution as an infringement of property rights). With tort law offering little to no protection outside property or in cases of diffuse pollution the need for federal or state regulations rose. However, the US-Constitution doesn't offer an explicit mandate for environmental regulations. The Supreme Court ruled that the 'commerce clause' to the constitution also allows regulations for activities that have substantial effect on commerce, materials and persons which move through the channels of commerce. Like in the case of article 95 EC Treaty the element of free movement of goods thus also can serve as a basis for environmentally regulation - although in both cases this will clearly involve a weighing of environmental protection against the free movement of goods. Note that both in the EU and the USA - the same might to a certain extent also be said for the international framework of the World Trade Organisation - (member) states, as a result of this aim of a free movement of goods, will have little to no competencies in the field of environmental standards for products as opposed to standards for (emissions and procedural requirements of) industrial establishments. Another important basis for federal environmental policies in the US is the 'property-clause' that enables the federal congress to regulate (with all the powers of a state legislature) over the public domain. The ancillary powers as stated in the 'necessary and proper clause' and in the 'supremacy clause', enforce these powers, but apart from the limitations, such as following from the 'takings clause', there seems to be a tendency to respect the states' sovereign powers (if only because the co-operation of the states is crucial to achieve federal environmental goals).

Finally, one should ask whether it is important to have an explicit or implicit (constitutional) legal basis for environmental regulation. For instance, in the case of the United Kingdom there does not seem to be an explicit need for such a basis simply because the concept of the 'sovereignty of parliament' suffices, and indeed lack of a specific legal basis has not stopped any of the other EU Member States from introducing environmental regulation.

In all of the contributions mention is made of the leading environmental principles. In some cases, as for instance in the Italian draft proposal for a framework law for the environment and in the Spanish Constitution, explicit reference is made to the principles of article 174 EC Treaty. Indeed, in most cases there is a strong similarity between these EC principles and the national principles. In most cases there is a legal basis for these

principles - they are mentioned or applied in general or sectional environmental statutes. The principle of Best Available Techniques (BAT) can be found in Finland's Water Act and Air Pollution Act. Nevertheless, these principles are generally considered to be guidelines for policy making, rather than legal principles such as principles of natural justice or proper administration. In the case of Austria, however, the author refers to the fact that the Constitutional Court has in one case acknowledged the precautionary principle as an 'element' of environmental law. It would require further research to find out whether perhaps in this case as well as in other cases there is more to the environmental principles than meets the eye. Then again some principles, such as the precautionary principle - the European Commission recently issued a communication on this principle -, are more easily connected to legal concepts, such as liability or the burden of proof, whereas other principles, such as preventive action or the integration principle, primarily express certain goals and are of a more political nature.

Unlike the EU, the US-Constitution offers no similar specific environmental principles. Only in a broad sense can one derive some 'directions' for environmental regulation on the basis of the doctrines on the earlier mentioned, most relevant constitutional clauses. Furthermore, the so-called federal 'environmental justice' issue doesn't seem to have evolved to a level comparable with EU-principles. Whether or not US state-law offers a different picture supersedes the scope of this book.

After the legal basis for government action, the framework mentions the possibility of a statutory or perhaps even constitutional provision entailing a 'duty of care' towards the environment from the individual citizen. Section 20 of Finland's Constitution offers an example by laying down a general responsibility of 'all' towards nature, the environment and the cultural heritage. More specific and clearly binding is article 22 of Belgium's Flemish Regional Environmental Decree stating that anyone who undertakes classified work must, regardless of the permit granted, always take the necessary measures to avoid damage, nuisance and serious accidents, and, in case of an accident, limit the conesquences. In this case the duty of care provision is clearly enforceable, but limited to those members of the public who undertake classified work. In the Dutch Environmental Management Act, article 1.1a has a broader range: all citizens have a duty of care towards the environment, both in avoiding harm altogether and in limiting the consequences if harm is done. Because the provision is aimed at every member of the public and the wording of this duty is relatively vague, the legislation stipulated that penal enforcement is excluded - only administrative and civil law sanctions are allowed for.

As editors we expected to find more similar general duty of care provisions throughout the countries of the EU. The fact that we found only a few may be explained by two factors. On the one hand, some of the contributions, such as the Austrian one, clearly state that there is no general duty of care but that within specific sectional statutes there are specific duties of care laid on a particular group (of, for instance, entrepreneurs or permitholders) and with regard to specific kinds of environmental pollution or damage. The matter of legal certainty for the public is often more adequately served by such a specific arrangement. On the other hand, it might be that provisions for civil liability are considered (more than) adequate to serve the purpose of a duty of care provision. Thus there would be no need for further, general provisions. Further research into these kinds of general provisions would be a worthwhile project. In that respect a comparison could also be made with the USA (on a state level).

As far as the environmental legal framework is concerned one should note that in some EU Member States, like Germany and the Netherlands, and, outside the EU, in the USA, there is a 'General Administrative Law Code' (or Administrative Procedures Act) that is binding for administrative acts that concern the environment, especially when it concerns taking a decision on a request for a permit or for administrative enforcement. In some contributions, such as the Danish and Finnish ones, mention is made of specific statutes that lay down general arrangements for certain administrative activities, such as the processing of administrative cases (for instance, with regard to the right to be heard). In other contributions explicit reference is made to principles of natural justice and proper administration which government authorities have to abide by. One could well imagine that it depends on the basic premises of constitutional and administrative law whether or not the codification of such principles is allowed for. If there is a trend towards more general administrative statutory arrangements, then it seems that we are still on the very brink of that development.

There does, however, seem to be a trend towards 'general environmental codes'. If we take for instance Denmark, Finland, Ireland and the Netherlands, then we find that each of these countries has some form of a general Environmental Act. In some other countries, such as Germany and Italy, one can point to initiatives sometimes even draft proposals for such a code. In Luxembourg and France however no plans are made in that direction.

The main reasons for making or trying to make such a code would be to synchronize procedures, create more uniformity in procedures and standards so as to promote legal certainty, to lessen the administrative burden and, last but not least, to promote integrated preventive measures. In many contributions remarks are made on the fragmentation of environmental legislation so as to underline the need for a general environmental law code - in some cases, like in Italy and Denmark, attempts are made to improve co-ordination or co-operation between authorities to overcome fragmentation in the relationship with civilians or the general public. The EU (or EC) does not offer a General Environmental Law Code for the whole of the EU. There is however the EC-directive on IPPC (Integrated Prevention Pollution and Control) that will - mainly through its procedural, but to some extend also through its limited substantive provisions - surely add to the trend of introducing such codes in member states, and will also increase the similarities between them. Clearly the EU Member States are busy implementing this directive (and are sometimes struggling with the introduction of the proper standards - such as BAT). Before we reach the stage of truly compatible environmental law codes throughout the European Union, we shall see three systems of environmental legislation: strictly sectional regulation; sectional legislation along with general regulation for the procedures of specific environmental acts (e.g. licences); general environmental legislation (not only procedural) with additional sectional statutes. As this distinction shows, we shall probably never witness a situation in which all the environmental statutory provisions of a country are brought together in one environmental code. The subject matter of environmental problems, as well as the dynamics of technological, scientific and political change and specific economic interests (such as exist today in the area of nuclear energy and genetic research industries) rule out such a situation - unless our idea of a code is itself divided into relatively separate parts.

Roughly the same applies to the USA where there is not a general Environmental Law Code on the federal level, but a patchwork of a number of sectional statutes. Presently

there is no initiative to create a federal framework statute which is probably due to the federal structure of the union (i.e. the state sovereignty). By the way, this more fragmentated approach is mitigated through the existence and central role of one overall EPA.

2.3 LEGAL INSTRUMENTS

It is clear from the contributions that there is a trend towards 'indirect regulation and selfregulation'. Almost all of the authors mention taxation, subsidies and tradable emission rights, as well as gentlemen's agreements and contracts (between government and Industry) as alternative instruments to the more unilateral direct regulation. It goes beyond the scope of this comparison to expand on the various forms of alternative regulation, but it would surely be a worthwhile project to investigate along which lines and to what extend these types of regulation are pushed and indeed applied. Within the EU there is a clear trend towards more indirect and less direct regulation, as is presented - in a general fashion - in the 5th and 6th Environmental Action Programmes. For a number of issues the EU offers instruments, such as taxation, subsidies, (voluntary) agreements and systems for environmental care. Sometimes on the EU level only a framework is given of how to use certain instruments but not the instruments itself (like levies). In the USA the direct regulation still pre-dominates, but (especially) indirect and (also) self-regulation have become increasingly popular. Compare the 1995 EPA-Project XL on the basis of which regulations can be set aside by an agreement - in most of the other states this is not the case and the agreements are more on the level of branches of industry and government and not between the body that grants a permit and an individual company - and fiscal incentives towards realizing the Kyoto-aims. The trade, on the basis of the Clean Air Act, of certain emission rights (such as on sulphur dioxides) is also a striking example of this trend. Nevertheless as one reads the various contributions to this book, it seems as if some of the euphoric on alternative regulation have died down. It has become increasingly clear that indirect regulation and self-regulation suffer from drawbacks that will in many cases be outweighed by the advantages of direct regulation. All in all today's trends seem to point in the direction of a less dogmatic, more eclectic approach in which dependent on the issue at hand the optimal mix of instruments, regardless of their character, is sought.

For the time being direct regulation clearly dominates the regulatory spectrum and therefore some general comparative remarks will be presented here on the main instruments of direct regulation, such as planning, quality standards, permit systems, general emission rules and environmental impact assessment.

'Planning' has clearly become one of the main instruments of environmental law, forming - so it seems - a bridge between policy articulation and regulation - like in the case of the EC-Environmental Action Programmes. In many cases planning resembles the setting of policy guidelines, such as in the United Kingdom, with the so-called Planning Policy Guidance documents. In most cases environmental plans or programmes are not in themselves binding, as for instance in Finland, where many existing plans are not linked in any way to permits, though their content can be a basis for further regulation and must be taken into account for instance when a decision has to be taken on a request for a permit. In the Netherlands the Environmental Management Act explicitly states that the competent authority has to take account of its environmental plan when deciding upon a request for a permit.

When we say that environmental planning has become one of the main instruments, then it must be stressed that in some EU Member States urban or physical planning has a more important impact on environmental regulation, for example in Ireland where local government plans mainly concern 'land-use management'. In other countries, such as Denmark and the Netherlands, urban planning is very important in addition to specific forms of environmental planning. In the Dutch situation the relationship between the two types of planning crystallises in the so-called system of 'leap-frogging': a practice of consecutive mutual adjustments of environmental and urban plans; but this system is currently under revision. In Austria, in a similar way, the competent authority has to pay due regard to environmental aspects in urban planning activities. Whether an urban planning system alone could suffice for environmental purposes is a question that cannot be decided on the basis of this book's contributions alone and would need further study. It goes without saying that environmental developments are closely linked with urban planning and much will also depend on how the concept 'urban' is interpreted. In addition to land-use and prevention of pollution the third element in this perspective, namely nature protection, is in some states (like Spain) also a main focus. There seems to be more integration ahead between these elements, not only in the field of planning by the way but also in relation to enviornmetal permits, maybe in light of the key concept of 'sustainable development'. Of course in the field of Environmental Impact Assessment one is already more familiar with tis integrated approach.

In a number of EU Member States with environmental planning there are sectional plans (or programmes) next to one (or more) general or overall environmental plans. Apart from programmes that give a broad description of 'the state of the environment', as for instance in Italy, more general environmental plans often limit themselves to offering a framework for targets to be met in the next few years and setting general guidelines for the overall effective reduction in pollution and proposing incentives and suggestions as to the use of specific instruments. Thus the Italian central government issues a (three-year) Action Programme on Environmental Protection. In Denmark there are several more strategic plans that concern the environment, such as in the area of sustainable development and biodiversity. It stands to reason that these more strategic plans are not, or only very loosely, legally binding. By way of an exception, parts of the general environmental plans for Belgium's Flemish Region (i.e. 'action plans') can be explicitly binding for particular authorities, although on the whole these plans are strictly indicative. Finally it must be mentioned that sometimes, as in the Dutch situation, after a general environmental plan on the national level, there are also general plans on the decentralised level of the provinces and - optionally - on the municipal level.

As far as the USA is concerned a general strategic plan on the federal level is, given the federal structure and sectional regulatory system, not in the cards.

Sectional environmental plans still seem to dominate the policy- and regulatory process. Germany, for instance, has no overall comprehensive environmental plans, but a wide variety of sectional plans (on air pollution control, noise reduction, water resources management, sewage disposal, waste management, landscape and forests). Sectional plans seem to be especially important in the areas of water quantity and quality (for instance in Austria, Belgium and Spain) and the disposal of waste, where plans tend to be rather more of a programmatic nature, in the sense that more precise and strict standards are set. The same applies to the USA. These plans can indeed be legally binding, like the Water

Supply Plan in Austria and the environmental policy plan in Belgium's Flemish Region. However, in Denmark regional and local sectional plans seem to be totally non-binding.

On the whole, it can be said that planning has become a major instrument of environmental law that is here to stay - in which regard it should also be considered that the Rio-conference has given rise to the introduction of plans on sustainable development. Next to plans or reports giving a general overview of the state of the environment, comprehensive plans stating general policy targets are being used throughout the EU Member States as the main regulatory incentives. At this point the federal practise in the USA clearly differs - as was mentioned above.

'Quality or immission-standards' are also becoming increasingly important. Though difficult by nature of the technical and scientific complexity of environmental problems, more and more standards are being set. In fact one could say that setting criteria for environmental quality is the core issue of environmental law. From these standards one can determine what levels of emissions into the environment are permitted. When speaking of quality standards, we are concerned with general standards. Almost all of the environmental statutes offer general quality standards. Often these standards are formulated in rather vague terms, like the environmental principles mentioned above. Standards like avoiding harm to the public health, or applying the Best Available Techniques (Not Entailing Excessive Costs, BATNEEC) are quite often applied. In Germany the Federal Constitutional Court upheld that these vague legal terms are 'constitutional' and no infringement of legal certainty. Today it has become apparent that EU directives, like the IPPC-directive, have given a thrust to the effort of setting this type of standards.

In the contributions we found many distinctions in terms of various types of quality standards. In the contributions on Belgium and the Netherlands a distinction is made between three types of quality standards according to the degree of their bindingness: limit values may not be exceeded at any time, directional values should be complied with unless the competent authority has very good reasons not to, whilst target values are more or less the expression of an aspiration (and sometimes 'wishful thinking'). We were unable to trace the same distinction in other contributions but assume that other countries apply a similar variety of types. Another distinction was that between general quality standards and specific standards that apply only to a certain area. In the Italian and Austrian contributions we saw that there were particular arrangements either for the protection of well-preserved areas (protection zones) or for the improvement of areas that have suffered from severe environmental damage (rehabilitation zones). For the protection or improvement of these areas quality standards are essential, either to make it clear that the high environmental quality that exists is preserved or that the poor environmental quality will be improved by lessening the burden of detrimental emissions. What we also found is that quality standards mainly concern the quality of air, water and soil, as well as noise.

Finally on this issue, some contributions referred to the need for technical expertise and the role that independent agencies play in setting this type of standard. Often independent organizations give their advice in the matter. In some cases special agencies actually set the standards themselves - for example in the USA. There the EPA, amongst others, has the power to set environmental standards on the basis of various sectional statutes (such as the Clean Air and Clean Water Acts. These standards in practise operate as minimum standards to which the states can add even more stringent norms.

The 'permit system' is still a dominant instrument in environmental law throughout all of the EU Member States and also in the USA. Although it is clear from the various contributions that on the one hand the use of general rules for emissions and on the other hand the duty to notify and/or register is increasing, the desire for an explicit weighing of interests in the face of a specific case (i.e. a specific industrial activity in a specific place) is still overbearing.

There are many different permit systems, and to make a full comparison of all types and particularities goes beyond the scope of this book. A few elements and trends will be pointed out briefly.

First of all it is clear that there is a trend towards Integrated Prevention Pollution and Control (IPPC). In an increasing number of EU Member States different kinds of pollution from various sources are dealt with in one statute under one permit system (for instance in Denmark, Ireland and the Netherlands). Thus different environmental hazards can be analysed simultaneously and preventive pollution control can be made effective in a programme of provisions that are closely and effectively locked together. However, there are still individual cases or environmental dangers that need a specific approach, for instance for hazardous waste as the Irish contribution shows. In national law many permits (often not those for dangerous waste) are handed out for an indefinite period of time, while the IPPC more or less requires regular updates (so permits should be handed out for a limited period of time).

Many countries have introduced legislation to ensure that permits, once they have been issued are indeed from time to time put under administrative review, like for instance in the cases of The Netherlands and Denmark.

In several countries for a large number of small sized activities general rules at the central level are set up to replace individual permits (Denmark, Netherlands) handed out by decentralised authorities. The latter have to be notified and stay competent to enforce these rules. In the USA one speaks in this perspective of general permits. The main reason for doing this is to lessen the burdon for the administration and to come to a more equal treatment for industry. As a consequence the possible involvement of third parties may be restricted.

Public participation has clearly become a cornerstone of the permit system in the EU and the EU Member States and in the USA (on the basis of the Administrative Procedures Act), although there are differences in the categories of people who can participate (only those with a specific 'subjective interest' as in Germany or 'every citizen' (United Kingdom and the Netherlands). As far as the EU is concerned an important role is played by the Aarhus-convention that has put forward three cornerstones: access to environmental information; public participation; access to judicial review in environmental cases. On each of these subjects existing EC-directives will be adjusted and new directives introduced, which will have major consequences on the level of Member States.

Another point of difference is that of the competent authorities for issuing permits. Whether these authorities are placed on a more central or decentralised level of government or are independent from political control (a special agency) or, apparently, combine administrative and judicial activities is almost impossible to unravel, let alone describe in detail. Many of the differences in the division of competencies - again - seem to be linked to the particular constitutional and administrative law framework of the country in

question. Historical developments and geographical circumstances (consider the (former) water boards in Finland) seem to play a predominant role.

'Environmental Impact Assessment' has been introduced in all of the EU Member States, mostly on the basis of the (amended) EU Directive 85/337. In fact, as is stated in the German contribution, the idea of having environmental impact assessments (in short EIA) follows from the precautionary principle; before a project can get its 'go ahead', the possible environmental impact thereof has to be described and evaluated. In all of the EU Member States the initiators of a project that is listed as a compulsory EIA project have to produce an impact report prior to engaging in the activity. The obligation to make a report containing an environmental impact assessment has - in all EU Member States - been integrated within existing general or sectional statutes. In most cases the obligation is linked to the request for a permit; exceptionally, for instance in the Netherlands, the list of projects for which an EIA is required also includes specific forms of large-scale urban and energy planning.

As far as these contributions show, the obligation to produce an EIA rests with the initiator. The Belgian contribution specifies that according to Flemish regulations the initiator has to choose experts from a list of recognized specialists, who then produce the EIA. Whether such a system is also practised elsewhere is unclear. It is, however, clear that most EU Member States have a provision whereby, for every project to be assessed, specific instructions are set out as a guideline for the make-up of the EIA.

Impact assessment also involves public participation; in some cases, as in the Netherlands, any member of the public can enter into the procedure. In other cases, like in Finland, it seems to depend on whether a significant number of people is likely to be affected; if this is the case then a wider range of parties can participate.

Quite a few authors mention special agencies that are involved in the assessment procedure. Both Italy and the Netherlands have special committees for the EIA, and in Finland and Belgium the Regional Environmental Centre and the Flemish Environmental Administration have a particular stake in the procedure. It seems that the role of most of these agencies is to offer either instructions (guidelines) for the EIA beforehand, or to give an expert opinion on the content of an EIA.

As to the content of the report, all the contributions show that the project has to be described, and the possible environmental effects have to be stated as well as the measures that are contemplated in order to prevent or limit these effects. The contributions on Belgium and the Netherlands also mention that alternatives have to be included in the report. These alternatives could include considerations as to the location of the project. In the Danish contribution it is shown that the location does after all play an important a role, even though the competent authorities operate on a regional basis.

Finally it is clear from the contributions that - as far as we could deduce - the approval of an EIA is as a general rule distinguished from the decision on the request for a permit at hand. So a negative outcome of the EIA proceedings not necessarily leads to a refusal of the permit. Spain may be an exeption to this rule. In the German contribution reference is made to the problem of standards: the EIA itself is based on ecological standards whilst the decision on the relevant project rests on standards that include other interests. The question is to what extent the decision is influenced by the standards used in the report (discretion).

In the USA Environmental Impact Assessment (Statement, EIS) can also be considered to be an acknowledged environmental instrument. On the federal level the obligation to make an EIS is laid down in the national Environmental Policy Act and concerns all federal agencies whilst performing major federal actions, like permits and regulations, significantly affecting the quality of the human environment. This obligation is limited to having to consider the environment and doesn't involve the weighing of the environmental interest. The federal EIS also includes the need for formulating alternatives to the proposed action and a study of the sort term uses and long term consequences, as well as clarifying the uncertainties of the effects and potential mitigation measures. The EIS-analysis is to be conducted early on in the planning and development stage. One should however consider that most environmental planning occurs at the state-level and thus doesn't fall under the federal EIS-obligation. It will then depend on stately regulations whether or not a (state) EIS has to be made. The striking difference between the EU EIA and the USA EIS does seem to be that the later limits itself to the federal level and to an obligation of government agencies and does not address private operators. A recent EC-directive also obliges Member States to produce EIA's with regard to national plans and programs and not only in relation to the realisation of specific activities at the stage of a request for a permit.

2.4 ADMINISTRATIVE PROCEDURES, ADMINISTRATIVE APPEALS AND JUDICIAL REVIEW CONCERNING ENVIRONMENTAL PERMITS

Public environmental law is often laid down in copious sectional legislation (for instance dealing with air, water or soil pollution, noise, et cetera.). The sectional 'permit procedures' often differ from one piece of sectional legislation to another. Examples of this sectional approach are to be found in Italy, Spain, the United Kingdom, Germany, and apart from some IPPC-licences, in Ireland. In countries in which activities basically require a more integrated environmental licence, other environmental permits are sometimes also required (for instance, specific cases of waterpollution or water extraction permits in Finland), whereas separate building permits are generally necessary. Some national legislation deals with co-ordinated procedural provisions. Some national legislation even goes further. In Germany, for instance, the building permit can be incorporated into the environmental permit.

In several countries one can see a shift towards more uniform administrative procedures for handing out sectional environmental administrative permits (Finland). In places where basically only one integrated environmental licence is required there is logically only one administrative procedure for this licence (Belgium). There are countries in which an even more general administrative procedural law exists for the establishment of (all) administrative acts (for instance, in Germany, Austria, the Netherlands and the USA). However, one can say that in this case environmental legislation often holds specific (additional) provisions.

Whether or not the procedures for environmental administrative acts are laid down in the various sectional environmental acts, in one integrated environmental act or in legislation dealing with a general administrative procedure for administrative decisions, one can see similar elements in them: such as the duty of authorities to give notice (to inform the public) of applications for environmental licences, the duty of authorities to give environmental information, and the opportunities for public participation prior to the administrative decision by the authorities. Sometimes one can really speak of an actio popularis where everybody is allowed to make objections against, for instance, the draft issue of an environmental licence (Netherlands). Sometimes, however, even in this early phase in the administrative procedure one has to have a kind of personal interest or to be affected by the project in order to make objections (Italy). In that case, the opportunities for environmental organizations to participate in administrative licensing, especially when acting in the interest of more general environmental values, obviously are limited or absent. Although in the last ten to twenty years rights for general public participation in this respect may be said to have increased - this certainly applies to activities for which an EIA procedure has to be followed - the consolidation of these participation rights does not always seem obvious. However, within the EU, the before mentioned Aarhus-Convention will, as far as access to environmental information, public participation and judicial review in these environmental cases is concerned, may lead to changes and additional statutory provisions to ensure a greater and more significant public involvement in the environmental administrative decisionmaking process.

Apart from public participation, in most countries legal provisions exist concerning advisory agencies, time limits for objections and appeals, et cetera.

Concerning 'administrative control' within environmental law, in several countries systems of administrative appeals exist against the (final) environmental decisions of administrative bodies. There are many differences between these various appeal systems. Sometimes, there is only one appeal possible to a hierarchic higher authority. Sometimes, two or three appeal authorities of this kind exist (Austria). Sometimes an appeal can be addressed to a more independent agency (Denmark, Ireland). Some permits are not handed out by decentralised authorities but by politically more independent agencies (for instance, in Finland, the so-called Permit Boards or in the United Kindom the Environment Agency). In the UK the Environment Agency issues certain licences and the appeal against these has to be lodged with the Minister for the Environment. In the USA EPA hands outs environmental licences and the appeal may be lodged with (a board within) EPA itself. Whether or not it concerns a hierarchic higher authority or a more independent appeal agency, mostly the legality as well as the merits of the decision are questioned. This may imply that the licence issued by the administrative authority is being replaced by the decision of the appeal body.

In some countries, if the statutory appeal is not used, the right for judicial review is lost (Belgium). An existing appeal is not compulsory for judicial review in Greece and in, for instance, Denmark an appeal is a not compulsory preliminary to court action unless this is otherwise stated. In the United Kingdom, in planning cases, only the applicant for the licence has some limited possibilities of appealing. In other countries, the range of those who can appeal is, sometimes according to the sectional legislation, broader. Environmental groups or associations can appeal in, for instance, Belgium and - more recently - in the United Kingdom. In the USA with permits under the Clean Air and Clean Water Acts (amongst others) there is the possibility, for the permitholder or an interested party to appeal through EPA's administrative process (which entails an appeal to the Environmental Appeals Board - within the EPA). Following this appeal (that is not an obligation to be admitted in judicial review) the party concerned may seek judicial review at a federal court.

In some countries an administrative appeal to a hierarchic higher authority or a more independent board is not available. For instance, in the Netherlands there is a general opportunity to make objections against an administrative act to the authority that made the act. (So that could be a third way in which appeal is dealt with next and sometimes they even accumulate). However, where environmental licensing is concerned and due to its extensive preparation procedures, in the Netherlands a direct judicial review against the licence is possible In Finland more and more access to truly administrative courts appears instead of that to appeal boards.

In EU Member States and in the USA (interested) individuals (within certain time-limits) can ask for 'judicial review' against administrative acts (from the licensing authority or the appeal instance) like the issuance of environmental permits. In some countries, there is also a right of access for environmental organizations although in general some interest has to be proved (Ireland, The Netherlands, USA). It is often up to the courts whether or not they take a generous attitude towards the granting of access to organizations (in Italy only certain approved environmental organizations can have standing). In general no legal representation is possible here.

In most EU Member States there are administrative courts that deal with environmental administrative decisions. In Ireland, the United Kingdom and Denmark there are no (specific) administrative courts and judicial review has to be sought in the ordinary courts. Sometimes we see that there is only one administrative court (in first and only instance: Belgium, Netherlands). Sometimes we see that there are more administrative courts (Germany) or that a choice may be made by the administrative court or constitutional court (Austria). Of course a relation may exist between in the number of prior out of courts proceedings and the amount of courts.

We mentioned that on appeal the legality as well as the merits of the administrative decision are at stake. In court proceedings generally only the legality is checked. This almost necessarily leads to more restrictive competencies for the courts. Because of the existence of discretion in issuing environmental permits (and enforcement decisions) such a decision is more likely to be quashed than replaced by a decision of the court itself. This being the case it is not impossible that administrative courts exercise quite strong judicial control (Germany), for instance in the light of constitutional provisions. Sometimes constitutional courts play that role (Spain). One also sees that courts are reluctant to address issues that were not (but could have) raised by the parties in earlier stages of the (prior out of court) proceedings (Netherlands, Germany).

In some countries judicial review suspends the administrative act (Finland). In other countries one has to ask for suspension of the respective administrative act (Belgium, Netherlands). Other variations are possible.

2.5 ENFORCEMENT (UNDER ADMINISTRATIVE LAW IN RELATION TO PRIVATE AND PENAL LAW) OF ENVIRONMENTAL LAW

In each of the EU Member States and in the USA legislation is available concerning the 'administrative enforcement' of administrative environmental law. When the environmental law is laid down in sectional acts there are sectional differences as to the possible enforcement measures that may be taken when the environmental provisions have been violated (Austria). The most important instruments of administrative enforcement are

fines, the withdrawal of licences, and the power to remedy the results of illegal activities and recoup the expenses thereof. The difference with penal law enforcement is that administrative enforcement as a general rule is only executed after a notice has been given and within a certain timelimit the violation is not ended, while penal enforcement allows for direct action.

Powers of administrative enforcement are often related to the authority to grant licences (Ireland and the Netherlands). Sometimes enforcement is in the hands of authorities or agencies that do not necessarily have the license authority (Finland, Belgium and France). It should be added that there are also supervisory environmental agencies with inspection tasks (Italy). Quite unique is the environmental warden - a kind of advocate for the environment - in Austria. For penal enforcement generally other (state) bodies are competent.

It has to be said that having the power of enforcement does not necessarily mean that it is actually used in practice. Sometimes there is some reluctance to do that because of the economic consequences. However, in general (certainly for people likely to be affected) judicial review is possible if the enforcement bodies do not take action in case of violation of environmental legislation and administrative acts like permits.

In the USA governmental enforcement rests with the EPA and the US-Department of Justice. The EPA can apply administrative actions but criminal and civil enforcement falls under the responsibility of the Justice Department. Much of the enforcement, even of federal regulation, rests with state authorities (on the basis of delegation). If a violation is detected the EPA may choose to approach the matter firstly with an informal response (informing the 'trespasser' and making it clear what action is required). Apart or next to that the EPA can choose to apply a formal response in the shape of a legal order.

One can see that in many EU Member States legislation has appeared giving compensation for environmental damage in general or in relation to more specific environmental damage or risk of damage. Private environmental law enforcement is first of all general tort law. Concerning private law liability there is obviously a shift from fault (subjective) liability to a more strict (objective) liability. In this respect it is interesting to refer to Austria as an example where formerly a kind of strict liability only in cases against the state and public corporate bodies, seems now also to be applicable between individuals.

A serious breach in the use of property may well lead to liability and a duty of financial compensation for the damage. It becomes more difficult to start a successful private legal action if there is no breach of subjective rights like property. What are the possibilities in the case of environmental pollution that affects the normal enjoyment of living and the protection of, for instance, the birds in the sky? Can the state alone claim compensation (see Italy) or can environmental organizations and even individuals do so? In countries where a clean and healthy environment is a strong constitutional right (either written or unwritten, explicitly or implicitly), the latter is more probable than in countries where such constitutional support is lacking.

In the USA citizens can bring forward two types of civil actions to enforce federal statutes: either against an agency or against the violating polluter. In the second type of action the citizen will have to give way if an agency, like the EPA, decides to file a complaint by itself. Generally speaking the provisions for standing in these types of citizen suits are relatively liberal. Because these suits are specifally dealt with in 'administrative' law one may wonder whether they really can be regared as 'private' law remedies. If

'administrative' law only stands for actions by governmental bodies this of course may be the case. Whatever 'heading' to be used, apart from these citizens' suits private persons can issue common law claims, especially on the basis of nuisance and trespassing.

An important question regarding private law liability is whether one can escape liability when acting in accordance with a valid environmental administrative licence. In penal law such licences almost always have a legalizing effect (see below). In private law this is not necessarily the case. Sometimes it is laid down in legislation sometimes it is based on case law. Although there are differences in the legal or judicial approach to this problem, in most countries it can be said that the licence in general has no absolute force. Denmark seems to be an exception. There, acting in conformity with a licence seems to grant exemption (be it only) from fault-based liability. In most of the cases in which polluting or damaging activities occur in conformity with a licence, we believe the amount of damage seems to be the key element in addressing the question of liability. Unreasonable damage certainly has to be compensated. However, a prohibition on a damaging activity for which a valid licence exists is in most countries not possible.

The question of compensation is sometimes linked to the licensing (see, for instance, Finland with reference to the former Water Act). However, even where administrative courts deal with the proceedings of licensing, civil law proceedings often have to be started to get financial compensation from the polluter.

Private law liability is primarily something between individuals. However, there is an increasing trend to use private law for the state. In some countries there is even a kind of administrative private law (Austria and the USA). Examples of this include preventive and clean-up actions, recoupment of expenses in cases of illegal pollution, and also the conclusion of agreements (instead of using legislation or administrative acts). In other countries there is a strict separation between private and administrative law leading for instance to the possibility that pollution by authorities is dealt with in another way (and by other courts) than pollution caused by individuals (France).

As stated, in principle administrative enforcement has a statutory basis and is generally linked to enforcement by (solely) the administration. In common law systems - case law is a more important basis - one sees that administrative law (statutes) often hold statutory private remedies not only for the administration but also for third parties, while in other systems these private law remedies seem to fall more often under general private law and can only be used by third parties. This also means that in common law systems like the USA third parties sometimes have private law remedies against the administration (for non enforcement) whereas in other systems that is not the case, where they can only ask the administration to issue administrative enforcement measures against the polluter. In other words: one should be aware of differences in the applicable terminology.

It is often assumed that penal law is the ultimum remedium where it concerns the penal enforcement of the law against those who commit environmental offences. Enforcement under penal law is certainly not always the ultimum remedium, and penal law enforcement does not lead directly to the lessening or avoidance of environmental pollution. In the United Kingdom, for instance, there is greater willingness to prosecute. Here private persons as well as administrative authorities can directly initiate criminal proceedings (see also Spain). And in Belgium penal procedures can be based on complaints by persons, pretending to be injured by environmental crimes. In criminal proceedings there are also opportunities for individuals (and environmental organizations)

to ask for financial compensation for damage suffered (Italy and the USA, albeit dependent on specific statutory arrangements). In this respect it is interesting to add that in Spain and the USA specialised prosecution offices exist to prosecute environmental offences. In France it seems to be so that the outcomes of criminal proceedings overrule the outcome of private court proceedings.

This illustrates the fact that enforcement through penal law, especially in recent years, has become more important and is not the ultimum remedium anymore.

We see that in many countries legal entities as well as natural persons can be prosecuted where criminal environmental offences have taken place (the Netherlands, Finland). However, the authorities themselves cannot always be prosecuted. Sometimes, the authorities can be prosecuted if they act like individuals and harm the environment (the Netherlands) or when the statute so determines (Denmark). In some other countries under certain circumstances officials can be prosecuted (Germany and Spain) and there can be criminal responsibility for administrative bodies who neglect their duties to control (Austria). Sometimes legal entities cannot be prosecuted (Germany, the USA). For instance, in Belgium environmental co-ordinators within (certain) firms can be prosecuted, as can company directors, managers, etc. For this arrangement see also Germany and Austria.

Penal environmental law can be found in the general Penal Codes as well as in the sectional environmental acts themselves. Especially in the latter case penal environmental law relies heavily on administrative environmental law. Sometimes this causes problems (Germany, the Netherlands and Spain). In this context the tendency to save penal environmental law for serious offences and to use administrative environmental law for less serious situations is perhaps relevant. In this respect, it is also illustrative that in some countries fining for environmental offences is allowed within the administrative environmental law as well as within the criminal environmental law (Spain). In that case administrative authorities mainly do the fining and not the penal courts (Austria). In the USA the EPA and the Justice Department frequently enter into enforcement agreements also with state authorities - to ensure a proper co-ordination in enforcement action.

Another relevant issue that we want to mention here is whether there should be a kind of strict criminal liability (see, for instance, the United Kingdom) or whether criminal offences should only be successfully prosecuted in cases where there is some gradation of dolus or culpa (most countries). Furthermore, with regard to the EU, we wish to point out that presently there is a proposal for an EC-directive on civil liability and a proposal for an EC-directive on penal enforcement both in cases of serious harm done to the environment. It remains to be seen if these proposals will eventually gain legal force.

What is interesting in more general terms, is that there increasingly seems to be an overlap or even a merger between the three types of enforcement (administrative, civil and penal). To a large extend this was already the case in common law systems, like the USA, the UK and Ireland. However, what we see in these countries is that statutory remedies are becoming more and more important (with different consequences for the actual enforcement, like between Ireland and the USA). In the European continental law systems the overlap between administrative and penal enforcement is much more present than before (since penal enforcement is often no longer the ultimum remedium). One sees that it can also be used by the administration and not only 'criminal' bodies (that could lead to cumulation of administrative and criminal sanctions without bearing in mind that for the

latter maybe more guarantuees are necessary (in light of article 6 of the European Convention on Human Rights). The doctrinary division between the public and the private law seems to keep these two systems of enforcement apart, but even there, for instance through the legal standing of NGO's and liability-suits by and against government, we see that there are (ever more striking) changes taking place. This threefold dimension is also recognized at the EU level. In addition to the originally more administrative legislation and requirements in the environmental law area also (draft) legislation concerning civil liability and criminal enforcement is added. Except from the aspect of a merger/overlap between various ways of enforcement, accumulation in this respect is a growing issue.

3 TOWARDS A IUS COMMUNE IN ENVIRONMENTAL LAW?

As we said in our introduction to this chapter, it is quite impossible to make a real comparison between the public environmental law of the various EU Member States solely on the basis of this book's contributions. The same applies to a comparison between the EU (Member states) and the USA. It does, however, seem possible to see that, certainly within the EU, there are many similar features and trends and that indeed these similarities are increasing. The acceptance of basic environmental rights, the duty of government to protect and improve the environment, environmental principles, the use of certain instruments - like planning, permits, quality standards and impact assessment - the opportunities for public participation, judicial review, all of these elements, though often different in their precise content or shape, have so much in common that we feel that one can indeed speak of a ius commune in environmental law. Naturally, within the EU, it is also clear that EC regulation plays an important role in this trend to greater uniformity in public environmental law - impact assessment and quality standards are examples of this, but in the near future also in the spfere or civil and criminal liability. When there are differences, as for instance in the organization of courts, the procedures for legal review and the state's organization in terms of federalism or decentralization, these differences often relate to historical and sometimes geographical circumstances.

We want to - almost - end this chapter by indicating the most important trends and developments in public environmental law in the EU (Member States) and the USA. Before we do so it should be stressed that this book, and the trends mentioned below, offer an insight into environmental law mainly on the basis of legal sources, such as legislation and (general) case-law. The daily practise of environmental policy-making, enforcement and, generally speaking, of environmental care, will often in time have made its mark on these legal sources but it should be taken into account that one cannot rule out that there is a (serious) gap between the law and the practise. In that field still a lot of comparative research is to be done.

Having said that, the trends are:

- In most countries environmental law meets the definition made in the introduction to this book: prevention of pollution. Of course differences may occur as to what is 'pollution' and whether or not sustainable development issues such as use of energy and natural resources etc. come in. There are countries in which local and regional land-use planning plays a very important part in the protection of the environment. Sometimes the same applies for the conservation of nature. Often natural circumstances may be decisive for the way in which the protection of the environment is shaped (legally).
- Environmental protection or the promotion of a clean and healthy environment, have increasingly been adopted within the constitutions of the EU Member States.
- In many countries important legislation has resulted from the implementation of EC law, such as that governing the procedure for environmental impact assessments, the duty to supply information regarding environmental data, and important parts of waste and water legislation. This supranational dimension leads, of course, to more similarities in the legislation of the various countries.
- The international dimension of national environmental law has increased, for instance, by the implementation of international treaties, principles like sustainable development, the results of the Rio Conference, and so on. Here one has to remind that unlike EC law international law is not always at the top of the hierarchy of national law within the various states.
- Principles (precautionary, polluter pays, BATNEEC, et cetera) seem to be more important as bases for environmental law. However, their implementation in actual licences is not very clear.
- Public participation rights and actual public participation have increased especially in EIA projects.
- Local authorities often have only executive powers. Central state bodies are the only important legal powers.
- Concerning environmental licensing there is a shift towards more integrated licences instead of several sectional licences. This reduces problems previously encountered between the various competent authorities and gives more uniformity in administrative procedures. Especially in unitary states some kind of general environmental codes have appeared.
- As well as integrated licences, integrated environmental plans are becoming more important.
- There is move towards more market-based instruments like taxes and agreements.
 Although public environmental legislation (with many direct legal instruments) has increased over the last ten to twenty years one can see tendencies towards deregulation and self-regulation. Both together with the adoption of general rules that set aside the need for permits seem to lessen the administrative burdon and are more efficient for business.
- Where administrative environmental legislation is well developed there is a greater chance that administrative enforcement is in fact taking place.

• Private environmental law and penal environmental law are of growing importance with regard to the enforcement of environmental law.

We hope that this book, through its contributions on public environmental law in the EU, the EU Member States and the USA, will not only function as a basis for greater insight but also as a stimulus to possibly greater harmony and thus more effective environmental protection throughout the countries and unions concerned, but also, in the day and age of increasing 'globalisation', that it will contribute to the appraisal of different types of environmental regulation across the world.

