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Justice in Environmental Law

Summary

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Justice in Environmental Law

Summary

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Kurzbeschreibung

Ziel des Forschungsberichts ist es, den Diskurs zur Umweltgerechtigkeit in Deutschland mit einer rechtswissenschaftlichen Betrachtung zu erweitern. In Abgrenzung zum weiten Begriff der „Umweltgerechtigkeit“ bildet der Kernbereich des Umweltrechts den Anknüpfungspunkt dieser Untersuchung. Ausgangspunkt der Untersuchung bildet die rechtsphilosophische Gerechtigkeitsdebatte, in deren Zentrum die diskursiven und kritischen Theorien der Gerechtigkeit stehen. Daran schließt sich eine Untersuchung an, welche Gerechtigkeitsanforderungen im Umweltvölker-, Europa- und Verfassungsrecht Niederschlag gefunden haben. Schließlich wird analysiert, in welchen Regelungen des nationalen Rechts der Luftreinhaltung sich Umsetzungsbeispiele der Gerechtigkeitskonzepte finden lassen. Vor diesem Hintergrund werden Optionen zu einer verbesserten Umsetzung der Gerechtigkeitskonzepte im Recht der Luftreinhaltung präsentiert. Kapitel 8 enthält einen Ausblick auf die Anwendbarkeit der gewonnenen Systematisierungsansätze auf andere Rechtsbereiche.

Abstract

The aim of this study is to provide a jurisprudential analysis to expand the discourse on environmental justice in Germany. The core content of environmental law – in distinction from the broad concept of "environmental justice" – constitutes the starting point of the analysis. It begins with the philosophy of legal justice debate, at the centre of which discursive and critical theories of justice are situated. This is followed by an examination of the justice requirements that have been incorporated in international environmental law, European law and constitutional law. In a final step, examples of the implementation of justice concepts in the rules laid down in national clean air legislation are identified. Against this background, options for the improved implementation of justice concepts in clean air legislation are also presented. Chapter 8 contains perspectives for the applicability of the developed systematizing approaches to other areas of law.

2 Summary

The study is divided into four main sections. To begin, the philosophy of legal justice debate, at the centre of which discursive and critical theories of justice are situated, is addressed in Chapter 4. Building on this, Chapter 5 focuses on the question of which justice requirements have been incorporated in international environmental, European and constitutional law. This subsequently leads to an attribution of the justice requirements in Chapter 5 to the justice concepts identified in Chapter 4 (see Section 5.6). Chapter 6 examines the implementation of concepts of justice in the rules of national clean air legislation. Against this background, Chapter 7 then presents options for improved implementation of justice concepts in clean air legislation. The study concludes in Chapter 8 with perspectives for further study and problem-solving approaches to dealing with justice in environmental law.

2.1 The basics

The philosophy of law is predominantly concerned with the notion of justice and its implementation in the legal system. Numerous approaches to defining justice have sprung from the philosophy of law, with both procedural and substantive concepts having become particularly influential. In the case of environmental law, procedural approaches include intergenerational justice, environmental justice, equality of opportunity, the concept of the intrinsic rights of nature and a capability theory of justice. Procedural concepts of justice are understood as theories which draw significantly on procedural ideas to justify and produce justice. In addition, substantive concepts of justice are rooted in discursive and critical theories of justice, all of which are indisputably affiliated to Rawls's theory of justice, the most influential version of neo-contractualism.

Irrespective of the particular significance of Rawls's theory of justice, it will inevitably be asked whether the theory ultimately resides in the lofty heights of the philosophy of law without being able to solve specific justice problems on the “levels” of ordinary law. The same is also likely to be asked of justice issues in environmental law with regard to the distribution of environmental goods and impacts. It is therefore crucial to "break down" Rawls’s theory of justice to legal practice and legal doctrine. This is regularly carried out with recourse to the general principle of equality in German Basic Law. It ultimately comes down to the "adequate complexity of consistent decision-making".[4] Consistency means formal equality in the sense which prohibits “the arbitrary unequal treatment of what is basically equal” and “the arbitrary equal treatment of what is basically unequal.” An action is arbitrary when it is not based on the principles of justice. According to the constant jurisdiction of the German Federal Constitutional Court, this is the case “when a group of addressees are treated differently to other addressees, without there being differences between the two that are of such a kind or weight that could justify unequal treatment."

[4] Luhmann, Das Recht der Gesellschaft, 1993, p. 214 ff, our translation.

This is surely accompanied by a “strict formalization of justice"[5] and, in so doing, the problem of justice undoubtedly shifts from justice in individual cases to a consistent classification of different cases.[6] This is not inconsequential, however – also with regard to handling specific justice problems in environmental law.

In addition, justice in environmental law largely remains a problem of procedural justice. This puts the focus on the value of lines of reasoning like information, participation and transparency in specific court decisions. Particular attention should be given to the management of weighting procedures and decisions. As far as the attribution of responsibility (which is coming into view) is concerned, the legislative authority also plays a key role. The legislative authority has to ask itself the extent to which it actually fulfils the responsibility for a just design of environmental law in procedural terms and what may be needed to contribute to a “just” environmental law. The procedural concepts of justice can serve as reasoning “clusters” from which the legislative authority draws his or her legal and political standards for a "just" environmental law.

However, it might only be possible in a limited sense to use theoretical considerations of justice to steer whether and to what extent environmental law ultimately proves to be just in reality. Rather, it will significantly depend on the extent to which the individual governmental functions (legislation, administration and jurisdiction) on the different standard-setting levels are committed to justice considerations and the requirements resulting from those considerations.

2.2 Justice requirements in the superior rule of law

Current legislation already contains multiple points of linkage to justice concepts. There is not, however, necessarily complete congruence between law and justice. At the same time, justice is a chief task of law and legislation is the most important instrument for establishing justice.

Answering the question of taking concepts of justice into account in legislation is complicated by the open-endedness of law in many cases. On the one hand, this open-endedness makes evaluation necessary and prompts standard-setting concretization. On the other hand, it also enables consideration of new problems of justice and changed notions of justice. In addition, the attribution of legal regulations to a specific concept of justice is not readily possible because of the significant overlapping of justice concepts and the frequently indirect effect of legal regulations. In the present study, the basic concept and function of these normative principles were thus elucidated and possible actions determined in order to enable the subsequent identification of intersection with specific concepts of justice.

In international environmental law, the concept of justice manifests itself in particular in the principles. Above all these include the no harm rule, the principle of equitable utilization of shared resources, the status principles (res communis, common heritage of mankind, common concern of mankind), the concept of sustainable development,

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5 Osterkamp, Juristische Gerechtigkeit, 2004, p. 126, our translation.

6 Luhmann, Das Recht der Gesellschaft, 1993, p. 357.

the precautionary principle, the polluter pays principle, the principle of common but differentiated responsibilities and the principle of equity. Ensured recognition of these principles as international customary law is only rarely established. By contrast, international contract law can have more normative force. It plays an important role in terms of concretization of the principles. Instead of setting specific criteria for fair distribution, procedural approaches (e.g. the weighting procedure with regard to the principle of equitable utilization of shared resources) are repeatedly referred to in the context of achieving a just result. The opening-up of the generally interstate obligation structures of international environmental law by means of procedural guarantees (e.g. in the Aarhus Convention) results in a partial individualization of international environmental law. In addition, some human rights of the first and second generations take into account specific environmental concerns. This individualization can contribute to effectuation of particular aspects of justice.

On the level of environment-related EU primary law, the objectives of environmental policy contained in Art. 191 para. 1 TFEU (environmental protection, improvement of environmental quality, health protection, resource conservation, international cooperation) share commonalities with the objectives of some justice concepts. These objectives are legally binding and justiciable although – due to the wide range of the matters listed therein – an infringement would only occur in the unlikely event of substantial failings of environmental policy. The principles set out in EU primary law (high level of protection, precautionary and preventive principles, origin principle, polluter pays principle, sustainability principle) are also legally binding and act as a benchmark and legitimation for the legislative authority, although the latter has a certain degree of leeway depending on the normative density of the respective principle. During the development of particular measures of environmental policy, the weighting criteria contained in Art. 191 para. 3 TFEU (available scientific data, regional environmental conditions, benefits and burdens of action, economic and social development of the Union and its regions) must be followed without these, however, being legal principles or regulatory conditions. Within the scope of this weighting rule, it is possible to discuss aspects of justice that go beyond solely environmental considerations. To date there is no substantive basic right to a clean environment on European level. Rather, environment-related claims can arise from certain basic rights such as human dignity (Art. 1 CFR), the right to life (Art. 2 CFR), the right to the integrity of the person (Art. 3 CFR) and the respect for private and family life (Art. 7 CFR). Starting points for the possibility of considering future generations in ensuring basic rights are found in para. 6 of the Preamble to the Charter of Fundamental Rights of the European Union. In addition, rights of equality and no-discrimination rules are laid down in Art. 20 and 21 CFR. Finally, the concept of fair treatment allows – within the scope of the right to good administration (Art. 41 CFR) – for further development of this "open quality standard".

On the level of national constitutional law, the governmental objective to protect the natural foundations of life as laid down in Art. 20a GG serves as an order for the legislative authority to specify it further and as guidance for interpretation and weighting, without Art. 20a GG containing specific standards and weighting factors. However, the future or long-term responsibility arising from Art. 20a GG obliges the government to make institutional and procedural arrangements, especially within the scope of the legislative process. By means of the reference to the future generations, intergenerational justice in particular is enshrined on constitutional level, with the environment in the future as the legally protected good. In addition to the rule of law, the principle of so-

cial state in particular contains important justice-related content as a result of its focus on equality of opportunities and in interplay with the general principle of equality, though much of it needs to be made more concrete. The general principle of equal treatment is closely linked to the concept of justice and thus has a prominent position in law as a justice requirement. The Federal Constitutional Court explicitly reviews the principle of equal treatment repeatedly in its decisions by using an “approach based on justice considerations”. The scope within which specific criteria for differentiation are set depends in particular on the provisions of German Basic Law. The rights to freedom, principle of social state or the governmental objective of environmental protection can have the effect of expanding or limiting this scope. The principle of equality primarily aims to produce intragenerational justice; however, it is not possible on the basis of from Art. 3, para. 1 of the German Basic Law to derive equality over time with regard to intergenerational justice.

Not least in consideration of Art. 1, para. 2 GG, the guarantee of the rights to freedom is a fundamental component of justice. The guarantee of human dignity (Art. 1, para. 1 GG), the general freedom of action (Art. 2, para. 1 GG), the right to life and physical integrity (Art. 2, para. 2 sentence 1 GG) and the property guarantee (Art. 14 GG) are relevant to environmental protection. However, in the regularly observed case of environmental impacts caused by private parties, their defence function is not brought to bear. An obligation to enact governmental environmental protection measures can only follow from an obligation to protect, whereby the legislative authority has a prerogative of evaluation. These environmental protection measures must also observe the basic rights of the environmental polluters (especially occupational freedom - Art. 12 GG and freedom of ownership - Art. 14 GG), which can result in environmental polluters having a superior position in terms of basic rights, which is a cause for concern in terms of justice considerations. In addition, with a view to procedural justice, basic right protection must be guaranteed by procedures, i.e. by designing the procedure to be an obstacle to devalorization of substantive basic rights.

The polluter pays, the precautionary and sustainability principles are enshrined in national law as well as international and European law and have, on these levels, a common core of justice requirements, but also a different degree of normativity. Lastly, important aspects of procedural justice and capability justice are found in the cooperation, integration and compensation principles. Nevertheless, these principles cannot per se be categorized as having a function as principles of justice. Rather, regulatory implementation is needed in consideration of the particularities of the area in which they are applied.

2.3 Implementation of justice concepts based on the example of clean air legislation

The implementation of the justice concepts identified in Chapters 4 and 5 in national ordinary law is analysed based on the example of clear air legislation in Chapter 6.

2.3.1 Proportional equality

To begin, the concept of proportional equality is used to re-specify the justice requirements of Rawls's theory of justice. Characteristics of this concept can be found in international environmental law (e.g. in the principle of common but differentiated respon-

sibility, the rule of fair and equitable sharing of common natural resources and the principle of equity). On EU level, Art. 20 and 21 CFR constitute points of connection. The principle of equal treatment in Art. 3 GG can be understood as a concretization on constitutional level of the concept. This rule of equal treatment is infringed “when a group of addressees is treated differently to other addressees, although there are no differences of such a nature or weight between the two groups that could justify the unequal treatment." The following three areas are used to compare different addressees in clean air legislation:

a) the perspective of polluters,

b) the perspective of citizens affected by the pollution; and

c) rules for balancing emitters and those affected.

The analysis in these areas concentrates in particular on three key air pollutants "particulate matter", "ammonia" and "nitrogen oxides" and the respective emitters. The analysis of the pollution shares of different groups of emitters leads to the following results:

- In the case of particulate matter, road transport and small combustion systems for house-holds contribute large shares. Agriculture also accounts for a significant share.
- In the case of ammonia, agriculture is almost the sole contributor of emissions;
- Stationary combustion plants and road transport contribute the largest share of NOx emissions. Industrial processing and agriculture only contribute small shares.

With regard to the emission sources, it was analyzed whether the group of industrial plant operators, the farmers and motorized road transport are treated differently in terms of the prevention and reduction of emissions and, if so, whether there are strong grounds of justification for this unequal treatment. Application of the polluter pays principle also plays an important role.

With regard to compliance with the limit values for ammonia and particulate matter, the analysis reaches the conclusion that agriculture is not handled relative to its contribution to pollution. For example, air pollution caused by "industrially" used arable and pasture land do not have to comply with the obligation to protect since they are not considered "plants" within the meaning of immission control. For livestock farming, the precautionary obligation and the obligation to protect only apply when a large number of animals are involved, e.g. pig farming with at least 1500 animals, laying hen husbandry with at least 15,000 animals or cattle farming with at least 600 animals. Furthermore, in livestock husbandry, the obligations to protect only apply in the case of ammonia, although it is said that the minimum clearances for protecting against ammonia are small compared to the emission levels of intensive livestock farming. For biogas plants there are no specific guidelines for compliance with protection obligations. There are seemingly no grounds for justifying this proportionally unequal treatment compared to the other groups of air pollutants.

Although high background levels of 10 PM are an important problem, the additional impacts arising from motor vehicle transport lead to the limit values being exceeded,

particularly in conurbations. In the case of NO_2 the additional environmental impacts of motor vehicle transport are the decisive factor in exceeding the thresholds.

In the interests of proportional equality, it is welcomed that precautionary obligations apply for all three groups of emitters in the construction and operation of plants and in the manufacture and operation of motor vehicles as well as fuel quality standards.

The positive result is weakened, however, by the precautionary requirements differing between the groups of emitters, particularly in terms of their degree of specification. For some industrial plants like the large combustion plants and waste combustion and co-incineration furnaces, the precautionary obligations are specified in the respective immission control regulations; these are specified for other plants in the German Technical Instructions on Air Quality Control (TA Luft).

In contrast, in terms of immission control in agriculture, there are no immission control regulations for either livestock farming or bio-gas plants, with the help of which the precautionary requirements in § 5 para. 1, no. 2 BlmSchG would be made more concrete. As a result, the administrative body – in the approval of installations pursuant to § 6 no. 1 BlmSchG and the subsequent order in § 17 para 1 BImSchG – must determine the precautionary obligations directly from the law for the respective installation. Due to the different views on the precautionary obligation and the different interests of the operator and the licensing agency, it can be assumed that in these cases the agency may not be able to impose any demanding precautionary requirements. For motor vehicle emissions, § 38 BImSchG contains precautionary standards, which provide for efficient emission control at the source of air pollution. Based on the emission standards for new vehicles and requirements relating to driving behavior, vehicle owners and operators are subject to obligations as polluters. The same applies to fuel quality standards and vehicle emission standards, which have to be met by all fuel suppliers and vehicle manufacturers.

From the perspective of citizens affected by air pollution, it is analyzed whether citizens in areas with high levels of air pollution (predominantly in conurbations) are handled differently to citizens in other areas and, if so, what grounds of justification there are for this.

The starting point of the analysis is the fact that the air pollution affecting the population differs between rural areas and urban conurbations as well as within the urban conurbations themselves. A major reason for this is that the legislative authority and jurisdiction follow the maxim of keeping pollutant loads to specific areas in order to keep other areas as free of pollutant loads as possible. The reverse approach – even distribution of pollutant loads over all areas – can result in a worsening of the overall situation. In addition, it raises the question of how areas particularly worthy of protection or still uncontaminated areas should be handled. The precept is implemented on the basis of the pooling and separation principle, which is applied in regional planning legislation and immission control legislation in different areas. The effects of the bundling and separation principle are limited by the governmental obligation to protect the population from harmful environmental impacts. However, below this level of protection – i.e. in the precautionary area – the pollutant load differs between various areas. As a result, the principles can lead to pollution load in affected areas being pushed right up to the permitted threshold by, for example, new loads being shifted to

areas that are already affected. In order to reduce the pollution load also in polluted areas, regional planning regulations contain area-related instruments. Moreover, there are also plant-related instruments like the subsequent order. However, the instruments can only make a limited contribution to achieving equality in the distribution and reduction of pollution loads since they are limited by the principle of proportionality.

The examination of proportional equality concludes with an analysis of compensatory mechanisms that can counteract unequal treatment on the part of the citizens in polluted areas. The identified provisions of air quality legislation contribute to a reduction of pollution loads caused by nitrogen oxides, particulate matter and ammonia, for all those affected.

The presented rules of air quality legislation contribute to a reduction for all concerned of pollution loads caused by nitrogen oxides, particulate matter and ammonia. The regulations on maximum permissible emission levels only indirectly result in a reduction of proportional inequality in the compliance with immission limits by reducing the overall level of pollutant load in the case of these pollutants.

The instruments of clean air planning and traffic restrictions have a direct effect on the compliance with immission limits and can contribute to the achievement of proportional equality. In the case of clean air planning, the polluter pays principle must be observed. Thus, the authority must include all emitters and find a balance between their contributions to pollution load and the associated costs.

However, there are appropriate doubts about whether the requirement to keep the period for compliance "as short as possible" can be realized. This is because a key factor for exceeding the immission limits of PM 10 are background levels, which cannot be reduced at short notice. Furthermore, the measures for compliance with the limit values should be enacted by the competent authorities in accordance with the relevant regulations. As a result, the weaknesses and limitations of these specific instruments – e.g. the subsequent order under § 17 BImSchG or the lack of limit values and regulations in the case of agriculture – have an effect on the execution of the measures in the German Clean Air Plan. Finally, protective measures are, in many cases, only successfully enforced when an action is brought before the court. While citizens can generally force the administration to set up an effective clean air plan, they cannot enforce implementation of the measures themselves.

Traffic restrictions – particularly the introduction of low-emission zones – can also be understood as emanating from the concept of equality of opportunity, which is closely linked to the concept of proportional equality. Such traffic restrictions should enable residents of affected conurbations to have the same protection against harmful pollution loads as other areas. However, it should be noted that traffic limitations, which on the one hand lead to compliance with air pollution standards and thereby reduce inequality, can on the other hand result in an increase in the pollution load of the area by shifting traffic to a different location. In principle, a pollution shift of this kind is contrary to the principle of § 50 sentence 2 BImSchG, which stipulates that it is not permissible for existing good air quality to be deteriorated.

Since this principle does not foresee absolute prohibition of deterioration, the authority can address a shift based on other, more severe concerns and nevertheless grant approval.

Other measures – such as an analogous application of the mutual obligation to observe the German Guidelines on Odour in Ambient Air in clean air legislation or monetary compensation in return for unequal treatment under the immission control regulations – are assessed as being unsuitable.

2.3.2 Weighting requirement and procedure

The weighting requirement and procedure aim to compensate for all relevant (environmental, social and economic) concerns. Compensation also has to be considered in the context of a discretionary decision. In international environmental law, the "rule of fair and equitable sharing of common natural resources", the "concept of sustainable development" and the precautionary principle include a weighting requirement as a procedural weighting mechanism. On a national level, constitutionality requires that in the case of discretionary decisions, appropriateness or proportionality in a narrow sense must be examined within the scope of a proportionality analysis. With the scope of discretionary decisions made by authorities, all advantages and disadvantages of the measure or project are weighed with and against each other in concrete cases. Constitutional provisions – in particular the basic rights of plant operators and the affected – need to be taken into consider in the balancing of possibly conflicting interests. The governmental objective of environmental protection in Art. 20a GG can have the effect of increasing the level of protection.

Based on the very detailed instruments of the subsequent order (§ 17 BImSchG), prohibition, decommissioning and removal orders (§ 20 BImSchG) and the licensing cancellation (§ 21 BImSchG) the legislative authority has enabled the licensing agencies to weigh the interests of plant operators to protect their investments with averting threats to human health and the environment.

2.3.3 Capability justice

Procedural rights are an important instrument for realization of the concept of capability justice, i.e. the introduction of prerequisites for a good life that enable each person to develop his or her capabilities. This can above all be realized by creating governmental structures which guarantee the greatest possible degree of personal responsibility of the individual. For example, citizens can influence authority decisions which affect environmental quality in their areas. Furthermore, procedural rights can also serve to realize the substantive content of procedural concepts of justice.

However, the implementation of capability justice does not extend to a human right to a healthy environment on an international level or a general fundamental right to environmental protection on EU level. Rather, certain human rights ensure environmental concerns and offer the fundamental right to life and physical integrity (Art. 2, para. 2 sentence 1 GG) as well as the protection of the minimum ecological subsistence level.

In clean air legislation, capability justice is realized through information and participation rights and the rights to bring legal actions. For example, § 10 BImSchG lays down information and participation rights of the public in the licensing procedure of immission control legislation. Everyone can make objections against the project from the perspective of the neighbourhood or the general public. Special arrangements apply to

plants that require an environmental impact assessment (EIA) because of their type, size, capacity or possible environmental impacts.

Recognized environmental organizations are strengthened in their position because they can file an objection as "affected persons" and then subsequently an action for review of the decision.

In contrast, both private objectors and environmental associations can seek judicial review of an approval decision made under immission control legislation by filling an objection and an action. This only applies if the affected persons allege the violation of a standard protecting third parties. While compliance with the immission limit values of the German Technical Instructions on Air Quality Control to protect human health has the effect of third party protection, it does not apply in the case of the precautionary obligations in § 5 Abs. 1 No. 1 BlmSchG.

The national law of the Federal Republic of Germany does not contain an explicit entitlement to class action relating to clean air planning. The jurisdiction of the courts has closed this gap with regard to capability justice by giving recognized environmental organizations the entitlement to bring an action against clean air plans under § 42 of the German Code of Administrative Court Procedure. As a result affected residents and environmental organizations can initiate a judicial review of the effectiveness of the measures in clean air plans.

The exercise of capability justice in the German Immission Control Act is curtailed by the preclusion rule in § 10 para. 2 BlmSchG, which serves the purpose of expediting procedures. Potential objectors have a month to view the licensing documents and must submit their objections in writing to the competent authority two weeks after the expiry of that period at the latest (i.e. a month and two weeks). Objections of individuals and environmental organizations which were not submitted by the deadline are not taken into consideration in later court procedures (substantive preclusion). The more complex the plant and the approval decision are, the more doubtful it is that third parties can assess, based on the procedural documents and within a month, whether and how they are affected by the plant. Against this background, the period for entering objections is regarded as extremely short and therefore criticized as a questionable reduction of legal protection.

2.3.4 Intergenerational justice

Intergenerational justice is concerned with balancing the satisfaction of needs of present and future generations by attempting to secure and improve the energy supply and vital resources (air, water, soil and fauna) for future generations. Principles of environmental law such as the precautionary and the sustainability principles could be understood as implementation of the concept of intergenerational justice. Since there are no legally binding, operational rules for it, intergenerational justice has still not found concrete expression in the three legal levels under analysis. An exception can be found in the governmental objective of environmental protection in Art. 20a GG with its inclusion of the responsibility toward future generations. Although the concerns of future generations do not gain the status of a legally protected good on this basis, they are included in the consideration of long-term effects (by summation, resource depletion, etc.).

In the German Federal Immission Control Act (BlmSchG), reference points for intergenerational justice can be found in the legislative objective, the discretionary approach of the precautionary obligation, the after-care obligations of the plant operators and the continuous adaptation of the German Clean Air Act and approval procedure to the state of the art.

Air quality standards were laid down in the 39th BImSchV to counteract the pollution loads on the environment and the population with non-degradable pollutants like arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons. However, the authorities have no effective instruments by means of which they can work towards compliance with these air quality standards.

The protection against ammonia emissions from agriculture is patchy and contributes to acidification and eutrophication of agricultural and eco-systems, which in the case of lasting damage puts the conservation of these ecosystems for future generations at risk.

2.3.5 Environmental justice

Environmental justice addresses environmental damage caused by human activity with a view to the associated impairment of eco-systems. Nature is considered as its own addressee, but is not granted rights of its own. Legal principles on the levels of international environmental law, the EU and national law, which may be regarded as embodying this concept, include the precautionary and protection principles, the integration principle and the principle of sustainable development. In national constitutional law, the principle of the welfare state (which needs further precision), the general principle of equality (Art. 3, para. 1 GG), the ban on discrimination (Art. 3, para. 3 GG) and the obligations to protect in basic rights legislation operate with a view to realizing equal opportunities.

2.3.6 Equal opportunities

Equal opportunities include the equitable distribution of environmental goods and loads as well as the costs, particularly in the substantive distribution criteria and procedures. It was possible for a number of principles and rules to be established on the level of international law, which are applied to the distribution of environmental goods and pollution loads as well as the corresponding costs for improvement, and can thus be regarded as an expression of equal opportunities. These include, for example, the "no harm" rule, the rule of fair and equitable sharing of common natural resources, the polluter pays principle and the principle of common but differentiated responsibilities. In European law, a number of principles can be understood in terms of indirect distribution control (e.g. the obligation to maintain a high and regionally differentiated level of protection in the case of environmental pollution, the origin principle, the precautionary principle, the polluter pays principle, the principle of sustainable development and the weighting requirements of Art. 191, para. 3 TFEU). In national constitutional law, the principle of social justice (which needs further precision), the general principle of equality (Art. 3, para. 1 GG), the specific prohibition of discrimination (Art. 3, para. 3 GG) and the obligations to protect in basic rights act with a view to the realization of equal opportunities.

2.3.7 Intrinsic rights of nature

The demand for nature to be granted its own rights is based on an eco-centric perspective of the recognition of the intrinsic rights of nature, which can be exercised in escrow by individuals (e.g. environmental lawyers), environmental organizations and public institutions or as a way of expanding the right of action. Such approaches could not be identified at the level of international law or the EU and national constitutional law. In clean air legislation, implementation of the concept of "intrinsic rights of nature" could not be found since nature is not granted subjective rights. The altruistic class action suit is also based on a subjectification of public interests and not exclusively the rights of nature.

2.4 Options for improved implementation of concepts of justice

In Chapter 7 options for adjusting or reducing the justice deficits in clean air legislation are identified.

In order to improve proportional equality between populated areas with different pollution levels and also to achieve intergenerational justice, the precautionary regulations should be expanded. For example, by introducing discretionary scope to refuse plant approval, the immission control authorities could be given an instrument to enable precautionary environmental quality objectives required by law to be actually achieved. Alternatively, a time limit could be placed on approval procedure in immission control legislation, as already exists in the water act for water use. A time limit would grant the authority a full review of the licensing approval - in contrast to existing regulatory instruments for retroactively adjusting plants to the state of the art. In order to be granted a new (subsequent) license, the plant would have to conform to the technical standards and environmental requirements that apply at the time of the new licensing procedure. However, the introduction of a time limit also carries the risk that the plant operator's adjustments to the state of the art are not carried out by the set deadline.

In order to improve the substantive dimension of justice concepts, the regulations of the 4th BImSchV should be reconsidered for plants requiring approval. For example, the proportional equality between the emitters of air pollutants could be improved by introducing transparent criteria for inclusion of plants in the 4th BImSchV. The aim is to subject all plants with comparably high environmental impacts to the increased requirements of plants subject to approval.

Furthermore, proportional equality between emitters of air pollution could be improved by including agriculture in clean air planning as a source of ammonia. To this end, immission limits would also have to be laid down for ammonia in the 39th BImSchV.

The current entitlement of citizens and environmental organizations to action and participation in the approval procedures of authorities and courts is essential to realizing capability justice; they must not be weakened in this function. Rather, this study on the implementation of justice concepts identifies some opportunities for improvement:

- the introduction of a right of action for environmental associations in the UmwRG to enable legal review of the preliminary EIA;

- the inclusion of judicial remedies for environmental associations against clean air plans in the law;
- clarification against whom a citizen can bring an action in the case of non-compliance with clean air plans; and
- the extension of the period for submitting objections in § 10 para. 3 BlmSchG.

2.5 Outlook

With the systematizing approach developed in this study, which blends justice concepts in the philosophy of law and the justice requirements in international, European and national law, other areas of special environmental law can be analysed, such as water, soil, mining, nuclear, waste and noise protection legislation. In addition, proportional equality could – as in the example of clear air quality management – be analyzed based on comparison groups. Thus, the different sources of noise pollution (e.g. road, rail and air transport) could be compared with regard to their incorporation in protection and precautionary requirements.

If there is an unequal burden on citizens in an area which is incorporated in an infringement of protection obligations in environmental law, it should be examined whether and to what extent an approach based on planning law can be pursued in accordance with the clean air planning under § 47 BImSchG. For example, in water, soil and noise protection law, the range of polluters could, based on the shares of emitters found in the planning area, be significant for the decision to use abatement measures (analogous to § 47 para. 4 BlmSchG). However, the available measures are also limited by the principle of proportionality. Alongside the sectoral introduction of this rule, the range of polluters specified in § 47 para. 4 BlmSchG could also be embedded as a rule in general environmental law.

A next step in the discussion on justice in environmental law should be the transition from a sectoral approach to analysis – as used in this study – to a cross-sectoral analysis of the overall environmental pollution of an area. With a view to the overall environmental pollution of an area, it would need to be considered how to apply the separation and pooling principle in the case of pollution in different environmental media. Existing multiple pollutions in an area could lead to a planning requirement that no additional pollution is permitted in that area. For example, the Berlin concept of environmental justice – which is used to identify the areas with multiple impacts in the 2014 “Berlin Map of Environmental Justice” – could constitute the basic instrument for determining the overall pollution of an area.