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## REVIEW

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### Evaluation of SEA practice in Germany - based on 143 case studies

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### Abstract

Based on 143 case studies from Germany from 2005 to 2018, the paper presents findings from an evaluation of the Strategic Environmental Assessment's (SEA) effectiveness and efficiency in practice. The results show that SEA has a significant impact on planning. On the other hand, there are a number of deficits in its application. The study therefore develops design options for a more efficient and effective application. Most of the options can be realised through administrative-organisational measures; others require changes at the legal level. The paper is based on a research study commissioned by the German Environment Protection Agency.

## Evaluation of SEA practice in Germany - based on 143 case studies

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### 1 Introduction

The legal framework for SEA (Strategic Environmental Assessment) – the Environmental Impact Assessment Act<sup>1</sup>, the Building Code<sup>2</sup> and the Spatial Planning Act<sup>3</sup> – has been applied in Germany at the federal level for approximately 15 years. On this occasion the research group sofia, Bosch & Partner (a consulting firm for environmental and landscape planning) and Prof Dr Thomas Bunge conducted a survey commissioned by the Federal Environmental Agency between 2017 and 2019.<sup>4</sup> The study evaluates the practice of SEA in Germany from 2005 to 2018. Similar to the structure of EU's REFIT programme which aims to ensure the efficiency and performance of the European regulatory framework, the study analyses benefits (effectiveness), costs and effort (efficiency) and deficits (effectiveness and efficiency). Based on the results it proposes modifications of SEA practice and its legal framework. Such an investigation is recommended as a domestic supplement to the review of the SEA Directive<sup>5</sup> under the REFIT process from 2017 to 2019. This evaluation concludes that the SEA directive is an important element of European environmental law but that its effectiveness varies according to the different sectors and types of plans and programmes to which it applies.<sup>6</sup>

The results of the study show that SEA has a significant impact on planning. On the other hand, there are a number of deficits in its application. The study therefore develops design options for efficient and effective application. Most of the options can be realised through administrative-organisational measures; others require changes at the legal level.

### 2 Research design

The methodology used for the study is a retrospective regulatory impact assessment. The core of the study is an empirical analysis of 143 case studies from the years 2005 to 2018 which are divided into three planning types, i.e. 'spatial planning', 'urban land use planning' and 'sectoral planning', and represent a broad cross-section of strategic environmental assessments in Germany. In 133 of these cases, the planning process included a SEA; ten further cases without a SEA served as a comparison. Since there were no surveys to date on the overall number of conducted SEAs in Germany. These numbers had to be estimated for spatial planning and urban land use planning.

In order to arrive at findings that are as concrete and detailed as possible, the procedure and the content of the SEA – in accordance with the legal requirements (UVPG) – are divided into the following sections ('stations'): (1) scoping process, (2) identification, description and evaluation of environmental impacts, environmental report, (3) consultation with other authorities, (4) public participation, (5) review of the representations and assessments of the environmental report,<sup>7</sup> (6) consideration of the results of the SEA in the decision on the plan or programme, and (7) summary statement (as mentioned in Article 9(1)(b) of the SEA Directive). Since it is likely that the SEA requirements may influence the planning process, the study also deals with the station 'Pre-effect of SEA' before the SEA process begins. Finally, another station is the legally required monitoring process of environmental impacts after completion of the SEA which is to be prepared by specific information in the environmental report. The monitoring practice itself could only be examined in some case studies within the framework of the study, because often there is not yet sufficient information from the planning authorities.

Methodologically, the first – most important – step in each station is the evaluation of the documents available in each case under

<sup>1</sup> The German Environmental Impact Assessment Act of 18. March 2021 (BGBl. I S. 540), last edited through Article 14 on the 10. September 2021 (BGBl. I S. 4147).

<sup>2</sup> German Building Code of 3. November 2017 (BGBl. I S. 3634), last revised through Article 9 on the 10. September 2021 (BGBl. I S. 4147).

<sup>3</sup> Spatial Planning Act of 22. Dezember 2008 (BGBl. I S. 2986), last edited through Article 5 on the 3. Dezember 2020 (BGBl. I S. 2694).

<sup>4</sup> See Führ (2023) for the full study report.

<sup>5</sup> Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programs on the environment, OJ 2001 L 197.

<sup>6</sup> European Commission (2019).

<sup>7</sup> This step is not specifically mentioned in the SEA Directive but is prescribed in § 43 (1) of the German Environmental Impact Assessment Act, being a pre-condition for consideration of the SEA results.

consideration, i.e. in the planning procedures including a SEA in particular the scoping documents, the environmental report, the review of this report and the subsequently prepared summary statement. The basis for this (in addition to a basic data sheet for the individual case studies) is first and foremost a target achievement level sheet, which defines the relevant criteria for each stage of the SEA procedure. With its help, it can be clarified on the basis of the documents whether the procedure and the results of each station – for example, the scoping report, the environmental report, the participation of the authorities and the public – meet the legal requirements in the individual case. In total, the sheet lists more than 100 characteristics relating to the content and procedure of SEA. In most cases, five levels are available for assessing the quality (e.g. for numerous statements in the environmental report from "(almost) completely adequate" to "not adequate overall"). Only for a few criteria there are just the categories "yes" or "no". In addition, the study uses a benefit-effort sheet, which was filled out by the person responsible for the respective SEA in the authorities; it mainly contains the assessment of this person on the duration of the individual SEA steps and on the effectiveness of the SEA.

Several methodological instruments supplement the evaluation of the written documents. Primarily, these are semi-structured interviews with the person responsible for the respective SEA which in particular allow additional details to be queried. Furthermore, three workshops were held – two of them only with representatives from urban land use planning and spatial planning, respectively, and one with representatives from all groups for the final discussion of the results – in which specific difficulties in the implementation of the SEA and possibilities for improvement were discussed. Finally, semi-structured interviews with four environmental associations from different federal states captured their views on specific topics. They deal with the integration of SEA into the planning process in terms of content and procedure, the relevance of public participation, the quality of the generally comprehensible, non-technical summary of the environmental report and the possibility of setting up internet participation portals.

The benchmark for the evaluation of the empirical findings are the requirements under the SEA Directive. The evaluation distinguishes between two concepts of quality. The term 'actual quality' refers to the findings that the

research team determined by means of the survey instruments when evaluating the documentation on the case studies, whereas the term 'perceived quality' refers to the assessments of the quality of the SEA in the respective procedure as stated by the SEA participants interviewed.

One challenge the study had to deal with was that the same survey instruments had to be applied to different planning levels. Another was the variety of involved actors and their different capacities at the respective planning levels. Especially in the context of urban planning procedures, the environmental report is often outsourced to external parties whose responsible person may be difficult to contact and to convince to take part in the evaluation.

### 3 Evaluation of SEA case studies – main findings

In the overall perspective, the study concluded that the legal requirements of the SEA Directive are fulfilled to a relatively large extent, but with clear differences in detail. In some stations, certain types of plans – predominantly spatial planning and sectoral planning – perform better than others; in others, deficiencies can be found in all types of plans to a similar extent.

The following sections 3.1 to 3.8 present the main findings and contain recommendations for the respective stations. General recommendations can be found in chapter 4.

#### 3.1 Station 1: Scoping process

In the scoping process, the study first clarified whether the respective planning authorities drew up a scoping framework and – if so – whether this was based on a discussion with the other authorities involved or on written comments from these authorities. In addition, the question arose whether and how well the scoping result is documented. In terms of content, it is of interest whether the respective SEA framework addresses and plausibly describes all the assessment questions required in the individual case, whether it identifies reasonable alternatives to the intended plan or programme specifications, and whether it makes specifications for the stratification of individual assessment aspects.

In station 1, the SEA person in charge in each planning type perceived the quality of the scoping as *good* (perceived quality) whereas the evaluators, based on the files, rated the quality as *average* (actual quality). Differentiated by plan types, the scoping quality of spatial planning appeared *average*, of urban land use planning *below average* and of sectoral planning *good*. Regarding the authorities' conduct in terms of

scoping, only one third of the case studies held scoping meetings and just under half of the case studies had a written consultation. Furthermore, in one sixth of the cases it was unclear whether a scoping process took place at all. Another finding is, that the documentation of the scoping results was very poor – if these results were documented at all. The study concluded that a good quality in the scoping correlates with a better environmental report (ER). Therefore, planning types should invest time in the scoping process and should also document it. The “delta” resulting from the difference between the legal requirements of the SEA and the actual status shows that the function of SEA station 1 is not fully utilised and that there is room for improvement. Based on these findings, the study recommends a legal obligation to document the scoping results in a written form.

### 3.2 Station 2: Identification, description and evaluation of environmental impacts, environmental report

The empirical analysis of the station ‘Identification, description and evaluation of environmental impacts, environmental report’ is one of the core parts of the empirical work. Here, the study primarily addressed,

- whether the respective environmental report contained complete information on all legally required items or which information was missing in whole or in part,
- the quality of the individual statements, i.e. whether they were formulated appropriately and plausibly.

In addition, it dealt with the methodology applied in the individual cases for forecasting and evaluating the environmental impacts, with the respective data basis, the scope and structure of the environmental report, and it dealt with the extent to which it was possible to integrate the preparation of the environmental report into the planning process.

In station 2, both the perceived quality and the actual quality of the environmental report were *good* in all case studies. However, only in 27 % of the cases the ER was complete, meaning that all aspects listed in § 40 (2) UVPG were covered completely. Similar to the findings of station 1, urban land use planning performed worse than spatial planning and sectoral planning. The examination of alternatives took place in about 60 % of all planning types, however, only in one half of those 60 % the quality was *completely plausible* or *plausible to a large extent*. Against the background that considering alternatives with lower environmental impacts is one main

function of the SEA, the study showed that these alternatives are only examined in a plausible way in 20 % of the planning types. As one reason for this shortcoming, person in charge pointed out that methodological standards are missing.

The identified delta can be seen in an overall solid quality of the environmental report but with deficits that need to be reduced. Therefore, the study emphasised that the ER should focus more on issues relevant to the decision-making and should be better integrated in the planning process. Thus, inter alia, the environmental report should be seen as a “master document” containing also the results of studies on specific impacts that may be required by other legal provisions (e.g. the Council Habitats Directive<sup>8</sup>).

### 3.3 Station 3: Consultation with other authorities

With regard to the consultation with other authorities, the first question was whether documented information on this step was available in the cases evaluated. If such documents were available, the study examined whether the people in charge of the individual SEA plausibly dealt with the arguments of the authorities involved.

The differences between the perceived quality and the actual quality of public authority participation were small for all types of plans. Both the perceived and the actual quality of the involvement of authorities were *good* in an overall perspective. However, documented information on the consideration of the opinions of other authorities was missing in an average in one third of the case studies of all plan types, in those of urban land use planning even in about half of the cases (47 %). Another finding is that the opinions of the other authorities involved had a significantly greater impact on the final version of the plans or programmes in the areas of urban land use planning and spatial planning than in the case of sectoral planning. Neuralgic points relating to station 3 can be seen in a lack of (purposeful) participation of the authorities. To some extent this is due, on the part of the involved authorities, to their having a shortage of personnel, and also to the fact that they have difficulties in understanding the function of their own position in the SEA process. The people in charge of the relevant SEA, on the other hand, estimated the knowledge gained through the other authorities’ opinions to be low. For both sides, the effectiveness and efficiency of the participation of these other authorities could be increased if the authority responsible for the SEA

<sup>8</sup> The Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OJ L 2016.

made it clear in its request for comments on which questions or issues it expects a response and what function this will have in the planning process. In this way, the SEA authority could receive comments that are more closely related to and relevant for the SEA, while time and effort spent needlessly by all parties involved would be reduced.

#### 3.4 Station 4: Public participation

As to public participation, the study focused on the one hand on the number of comments from individuals and associations that the authorities received in the individual cases and on the other hand on the question of whether the comments influenced the environmental report to a relevant extent. The study also examined whether the authorities used further participation formats that go beyond the legal requirements.

The basic data sheet asked, among other things, whether the number of statements made by the public can be deduced from the documents. This information was only found in 45 of the case studies examined (16 in urban land use planning, 15 in spatial planning and 14 in sectoral planning). Overall, the number of comments received covered a considerable range, with no comments at all being recorded in half of the urban land use plan procedures recorded in this respect, in a good quarter in spatial planning, and only in a little more than a tenth in sectoral planning. Across all plan types, half of the respondents rated the public participation as *good* (perceived quality) whereas the actual quality varied greatly and on average only achieved *below average* or *significant deficiencies*. In contrast to the findings is the fact that in about a quarter of the case studies, further participation formats were used that go beyond the legal requirements.

The study concluded that public participation could be improved through a bundle of measures, e.g. by providing guidance and recommendations to the public. The person in charge for the plan or programme could also put the ER on the internet and thus make it more easily available to the public. The proposal to set up web-based SEA portals at federal and state level (which to date do not exist) are equally worth mentioning. These can contribute to simplification, as relevant information may be accessed quickly and easily.

#### 3.5 Station 5: Review of the representations and assessments of the environmental report

In this station, the study dealt in particular with the question of whether the results of the participation of the authorities and the public led

to recognisable changes in the environmental report or the draft plan or programme. Examples for such changes would be, inter alia, if an environmental report or draft plan or programme contained, after the consultation phase, more differentiated statements on the avoidance or compensation of environmental impairments and on the monitoring measures.

In SEA practice, a synoptic approach has proven successful in the review: The individual comments made by the authorities and the public were summarised thematically in a table, and the SEA responsibilities indicated how they responded in each case. Although the impact of public participation at this late stage in the process is often relatively small, the review still led to recognisable changes in around 20 % of the case studies. The perceived quality was *good* for all three plan types. The values for the actual quality were somewhat lower but also kept in the *'good'* range.

The study concluded that – since it is not directly recognisable where the objections and comments lead to a change in the draft plan or programme – it is advisable to structure the synopses thematically, e.g. in a table, and to combine the objections and comments on each individual environmental impact, as well as the official responses to these comments, in one row of this table.

#### 3.6 Station 6: Consideration of the SEA results in the decision on the plan or programme

As far as the consideration of the SEA results in the final decision on the plan or programme is concerned, the study addressed four elements that are particularly relevant for SEA:

- the extent to which the planning authorities have taken the significant environmental effects into account in the final decision,
- the extent to which the plan or programme contains differentiated requirements for the avoidance and reduction of environmental impacts as a result of the SEA,
- the question of whether and how the draft plan was changed as a result of the SEA when the final decision was taken,
- the question of whether the planning authorities have considered the environmental impacts not only for individual specifications, but also for the plan as a whole.

Regarding the first element, the study concluded that the planning authorities considered the significant environmental effects in about 46 % of the procedures *mostly to a large extent* or even

*completely*, but at least *about half* in the final decision.

With regard to the second element, the planning authorities took the results of the SEA into account to *about half* or *for the most part* or even *completely* in almost 43 % of the cases. On the other hand, such consideration of the SEA results was largely or completely absent in almost 20 % of the cases. In almost 38 % of the case studies, the question could not be answered.

As far as changes to the draft plan at the time of the final decision are concerned (third element), these were recognisable in around 33 % of the case studies included in the evaluation. In spatial planning, the share of case studies in which the SEA led to changes in the plan was the largest.

Regarding the fourth element relevant for the SEA, in about 42 % of the cases environmental impacts for the plan as a whole were taken into account *about half, for the most part* or *completely*. In contrast, in about 10 % of the cases the planning authorities did not consider these effects at all or hardly. In addition, there are approximately 36 % of procedures in which the plan or programme did not result in any significant environmental impacts according to the results of the SEA.

In this station, the study came to the conclusion that the perceived quality of considering the ER and the consultation results in the decision-making was *good* in contrast to the actual quality perceived by the evaluators. The latter was in spatial planning *average*, in urban land use planning *below average* and in sectoral planning *just about average*. In the interviews, 50 to 80 % of the interviewees replied that a more systematic and structured consideration of environmental impacts had been the result of the SEA, compared to the situation before SEA was introduced.

Station 6 is particularly relevant, as the better or worse consideration of the SEA results in the final decision on the plan or programme will indicate whether the SEA is effective or not. In the overall view of the case studies and the assessments of the respondents and despite the differences in the individual cases, the result can be summarised as follows: SEA works. However, this does not mean that there is no further potential for effectiveness to be tapped. Thus, the study recommends e.g., integrating the SEA as early as possible into the planning process. Furthermore, a body or person should be specifically responsible for the SEA (ownership) and should be involved in the process of the final decision. In addition, the study recommends that the SEA results should be methodologically

sound and clearly formulated. In addition, reasonable planning alternatives should be included in the SEA as far as possible.

### 3.7 Station 7: Summary statement

With regard to the summary statement under Article 9(1)(b) of the SEA Directive, the study first determined in each individual case whether such a document existed. If this was the case, it assessed the plausibility of the information contained therein (e.g. how environmental considerations have been integrated into the plan or programme) and whether it contributed to the transparency of the SEA and planning process.

Across all plan types, the summary statement was only available for evaluation in 63 % of the case studies (86 % in spatial planning, 43 % in urban land use planning and 63 % in sectoral planning). This is surprising insofar as the summary statement is legally required. Across all plan types, the study concluded that the perceived quality of the summary statement was *good* whereas the actual quality in spatial planning and urban land use planning was only *average*. In contrast, the actual quality in sectoral planning was slightly higher than the perceived quality. The delta shows that the summary declaration as a station of the SEA seems to play a rather subordinate role overall. Therefore, the function of the summary statement should be better communicated to the competent authorities and illustrated for them in a better way, e.g. through examples of best practice.

### 3.8 Station 8: Monitoring

As far as the station ‘Monitoring of environmental impacts’ is concerned, the study was primarily concerned with the information on this topic in the environmental report.

The study addressed the question of whether the environmental reports contained such statements and – if so – whether they specified the envisaged monitoring measures in a plan-specific manner.

Plan-specific specifications of monitoring measures could be found *largely* or *completely* in more than half of the case studies of spatial and sectoral planning and in slightly more than one third of the case studies in urban land use planning. In about one third of the cases of spatial and sectoral planning, respectively, and in almost two thirds of the cases of urban land use planning monitoring specifications appeared deficient. About 7 to 9 % of the environmental reports had no information on plan-specific monitoring measures at all. These findings illustrate that there is still potential for

improvement. Thus, the study recommends legal clarifications. Furthermore, monitoring results should be documented in an online portal and there should be a central monitoring unit with a coordinative function. Monitoring results should be used as an input to the scoping process of the next planning procedure in order to close the ‘planning cycle’.

#### 4 Recommendations concerning the whole SEA process

As section 3 has made specific recommendations for each station, this chapter presents general recommendations to improve the SEA as a whole. These recommendations are closely linked to each other. One recommendation is to implement a SEA knowledge platform. All stakeholders and interested parties should have access to basic information on SEA, examples of good practices, current guidance documents and working aids as well as up-to-date data based on this platform. The platform should be designed in a user-oriented way in order to minimise the barriers to use.

standards, etc. Only at a few universities application-oriented courses on environmental auditing have been held on a regular basis so far. Hence, the study recommends education and training and the cooperation of individuals from different disciplines (e.g., geography, landscape planning, biology, meteorology, geology and/or hydrology). Additionally, there is a recommendation that in each planning authority the responsibility for these audits should be assigned to a qualified person (so called ‘product owner’). This SEA-person in charge should coordinate the SEA process, communicate with all stakeholders, and document all the relevant steps. The person shall also ensure that the SEA is carried out effectively and efficiently. Another responsibility is to integrate the SEA into the planning process, as the study concluded that these often take place in an unconnected manner. The below figure schematically summarises all general recommendations concerning the whole SEA process.

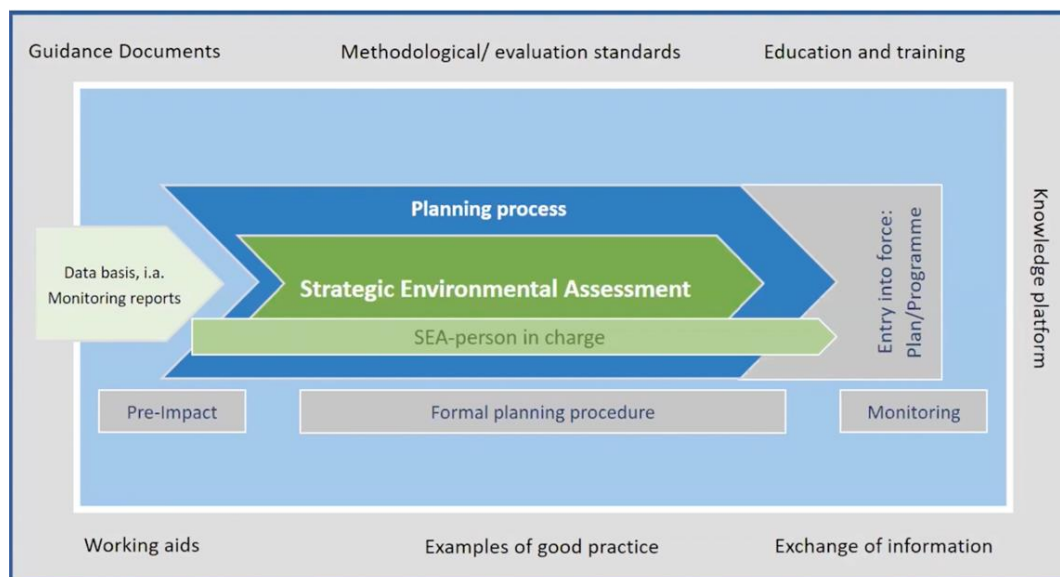


Figure: Recommendations to improve the SEA process

Another recommendation concerning the whole SEA process is to offer an external contact person to the planning authorities to address difficulties in a targeted and precise manner and to find solutions.

The study came to the conclusion that it is advisable to strengthen the exchange in the SEA context among different authorities. Thus, a good network of authorities’ representatives enables them to request help and information quickly and easily from their colleagues and to exchange information about innovations, problems,

#### Bibliography

- European Commission (2019): Evaluation of the Directive 2001/42/EG on the assessment of the effects of certain plans and programmes on the environment, SWD(2019) 414 final.
- Führ, M. (2023). Evaluation der Praxis der Strategischen Umweltprüfung in Deutschland und Entwicklung von Vorschlägen zur Optimierung des Vollzugs und des Rechtsrahmens, ed. by Umweltbundesamt, TEXTE 112/2023. Accessible [here](#) (last access 03.12.2023).



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## elni

*In many countries lawyers are working on aspects of environmental law, often as part of environmental initiatives and organisations or as legislators. However, they generally have limited contact with other lawyers abroad, in spite of the fact that such contact and communication is vital for the successful and effective implementation of environmental law.*

*Therefore, a group of lawyers from various countries decided to initiate the Environmental Law Network International (elni) in 1990 to promote international communication and cooperation worldwide. elni is a registered non-profit association under German Law.*

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

### Coordinating Bureau

Three organisations currently share the organisational work of the network: Öko-Institut, Technische Hochschule Bingen (TH Bingen) and sofia, the Society for Institutional Analysis, located at the Darmstadt University of Applied Sciences. The person of contact is Prof. Dr. Roller at TH Bingen.

### elni Review

The elni Review is an English language law review. It publishes articles on environmental law, focussing on European and international environmental law as well as recent developments in the EU Member States. elni encourages its members to submit articles to the elni Review ([info@elni.org](mailto:info@elni.org)) in order to support and further the exchange and sharing of experiences with other members.

The first issue of the elni Review was published in 2001. It replaced the elni Newsletter, which was released in 1995 for the first time.

The elni Review is published by Öko-Institut, TH Bingen and sofia.

### elni Conferences and Fora

elni conferences and fora are a core element of the network. They provide scientific input and the possibility for discussion on a relevant subject of environmental law and policy for international experts. The aim is to gather together scientists, policy makers and young researchers, providing them with the opportunity to exchange views and information as well as to develop new perspectives.

The aim of the elni fora initiative is to bring together, on a convivial basis and in a seminar-sized group, environmental lawyers living or working in the Brussels area, who are interested in sharing and discussing views on specific topics related to environmental law and policies.

### Publications series

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

### elni Website: elni.org

The elni website [www.elni.org](http://www.elni.org) contains news about the network. The members have the opportunity to submit information on interesting events and recent studies on environmental law issues. An index of articles provides an overview of the elni Review publications. Past issues are downloadable online free of charge.

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