
EIA Directive at the Crossroads – Analysis of the Commission’s Proposal from the Finnish Developer’s Perspective

*Ismo Pölönen, Timo Koivurova and Pamela Lesser**

Abstract

The main aim of the article is to examine the content and quality of the EU Commission’s proposal for renewing the Environmental Impact Assessment Directive (2011/92/EU, EIA Directive) particularly from the Finnish developer’s perspective. In addition to the legal analysis, this research is based on semi-structured interviews with seven companies operating in Finland. The article concludes that the proposed screening model would result in benefits for the developer in terms of providing mechanisms for project redefinition and mitigation proposals in the early phase of planning, which could lead to an avoidance of a full assessment procedure. This scheme may, however, weaken the environmental and participatory functions of EIA. Most of the other amendments proposed by the Commission would serve the environmental objectives of the proposal but not the goal of streamlining. At least in Finland, many changes proposed by the Commission would unnecessarily increase administrative burdens. The proposal approaches EIA as an authority-driven procedure and fails to fully utilize the developer’s expertise and abilities in accordance with smart regulation. In addition, the overlapping assessment duties in the current EIA Directive re-

sulting from the rulings of the European Court of Justice are discussed, and the authors suggest the Directive should not regulate on the extensive assessment requirement for the competent authority. Instead, the duty of the competent authority should be to carry out or facilitate efficient and independent quality control and produce conclusions on the likely significant effects of the project.

1. Introduction

The European Commission has recently introduced a proposal to substantially amend the Directive on the assessment of the effects of certain public and private projects on the environment (2011/92/EU, EIA Directive). This is the most significant attempt to revise the EIA Directive since its adoption 25 years ago. The proposal has two ultimate objectives. It is intended to streamline environmental impact assessment and to improve the current level of environmental protection.¹ Streamlining the EIA Directive is part of the Commission’s agenda for smart regulation²

* Ismo Pölönen, Associate Professor of Environmental Law, Department of Law, University of Eastern Finland. Timo Koivurova, Research professor, Director of The Northern Institute for Environmental and Minority Law, Arctic Centre/University of Lapland, Finland. Pamela Lesser, Researcher, The Northern Institute for Environmental and Minority Law, Arctic Centre/University of Lapland, Finland.

¹ See explanatory memorandum of the proposal (COM(2012) 628 final) and EIA pages of the Commission (<http://ec.europa.eu/environment/eia/review.htm>).

² Smart regulation means in the EU agenda “delivering EU policies and laws that bring the greatest possible benefits to people and businesses in the most effective way”. Commission 2013. Subsequently, in this article, smart regulation refers to regulation where business, civil society and diverse institutions act, where appropriate, as surrogate regulators in order to implement policy goals effectively, with high legitimacy and at the lowest cost to the state. *Gunningham & Grabosky 1998, passim.* and *Gunningham 2011 p. 174, 196.*

and for reducing unnecessary administrative burdens³. In terms of environmental protection, the latest needs for the reform arise from emerging environmental challenges, such as resource efficiency, climate change, and disaster prevention.⁴

The primary objective of this article⁵ is to analyze the content and quality of the proposal particularly from the point of view of the developer.⁶ Furthermore, the aim is to seek, where possible, regulatory options which would address the environmental goals of the EIA Directive and simultaneously lead to better regulation from the business perspective. There are two reasons why we have paid special attention to developers in this research. Many times EIA research is conducted with only superficial views of the developers' relationship to the process, even if they are the ones that often have the largest responsibility to implement it. Secondly, since the Commission argues that the proposal will simplify procedures⁷, it is useful to examine whether

the content of the proposal corresponds with this end, and thus benefits the companies.

In order to concretely demonstrate the implications of the Commission's proposal (if accepted), the suggested changes will be examined in the context of one Member State – Finland. The ultimate purpose of the analysis is to examine whether the proposed Directive benefits the Finnish developer. The Finnish case is also relevant for highlighting the strengths of the current EIA Directive compared to the proposed one. Finland has utilized the wide discretion given to Member States in the valid EIA law by emphasizing the role of the developer in the EIA process.⁸ The developer has an active role in the scoping and in organizing public participation. It is also the task of the developer to identify, assess and describe the environmental impacts of the project in an extensive manner.⁹ Previous research on the Finnish EIA legislation has shown that it is well-designed, at least from the perspective of

³ COM(2007) 23 final.

⁴ COM(2012) 628 final. Furthermore, there is a clear need for the amendments from the perspective of the EIA principles. The EIA Directive lacks some established principles of a high quality EIA system such as a mandatory scoping and follow-up. On the principles for EIA, see e.g. *IAlA* 1999 and *Wood* 2003 p. 12.

⁵ We want to thank the anonymous referee for the useful comments. We are also grateful for the interviewees for their valuable responses. The research has been funded by Academy of Finland project TERLA (14898) and TEKES project Testing Improvement Processes of Finnish Environmental Impact Assessments and the Modes for Application in Arctic Regions of Finland and Russia (1374/31/2012).

⁶ However, the environmental and participatory functions of EIA are also taken into account in order to understand the rationale of the Commission's proposal and to identify possible quality problems in the chosen regulatory techniques. Without considering these core functions, it would also be difficult, if not impossible, to seek a smart EIA model.

⁷ COM(2012) 628 final p. 4.

⁸ In Finland, the Act on Environmental Impact Assessment Procedure (468/1994, EIA Act) implements the EIA Directive as well as the Espoo Convention (30 ILM 802, 1991, in force September 10, 1997). Besides the EIA Act, the Finnish regulation on impact assessment is based principally on the Decree on Environmental Impact Assessment Procedure (713/2006, EIA Decree).

⁹ *Hokkanen & Jantunen* (2012) point out that the developers in Finland have learned to use EIA successfully as a planning tool and as a means to organize public participation. According to their interviews, some of the most experienced developers have adopted EIA as a main planning tool. The role of developers in the Finnish EIA has also been challenged. See *Kokko* 2013 p. 295–299, 303–306, 315. He argues that the dominant position of the developer and consulting companies in the EIA system should be better balanced with the other information sources.

the coverage¹⁰, flexibility¹¹ and mechanisms for public participation¹² and quality control¹³. As a whole, it seems that Finland has adapted a smart regulatory approach to implementing the EIA Directive and that it has gained wide acceptance by the practitioners.¹⁴

¹⁰ Pölonen *et al.* 2011 p. 122. EIA has wide-ranging coverage and the thresholds are at high, but reasonable levels. Annually between 30 and 50 projects undergo the assessment prescribed by the EIA Act. In the Finnish system, a lighter version of environmental assessment is applied to smaller projects, with the full-blown EIA, which on average takes 15–16 months (excluding both screening and permit decision phases), being justified in only the most extensive projects. For example, some 700 projects undergo environmental assessment annually within the environmental permit process under the Environmental Protection Act (86/2000). Ministry of Environment 2012 p. 20. This figure does not include the permits issued at the municipal level for the smallest projects, but only the permits granted by the state authority. In many other EU Member States, the number of EIAs is significantly higher and the duration for the EIA procedure is significantly shorter. See e.g. GHK (2010 p. 9 and 18) where the average duration of EIA in the Member States was estimated to be 10.1 months excluding screening but including the final decision.

¹¹ Pölonen 2007 p. 187–188. For instance, the content requirements of an assessment report take well into account the case-specific demands resulting from varying characteristics of the projects and the environment.

¹² Hokkanen 2007, *passim.*; Pölonen *et al.* 2011 p. 125–126; Hokkanen & Jantunen 2012. Due to the structure of the Finnish EIA system, the process is often started in the early phase of project planning (before the permit process begins). This helps the public to participate prior to the crucial decisions on the project plan made by the developer.

¹³ Jalava *et al.* 2010 p. 18–25; Pölonen *et al.* 2011 p. 123. Quality control is supported by the Finnish system in that one regional environmental authority (*EIA liaison authority*) carries out the quality control, starting from the very beginning of the EIA process. This enables a single authority to specialize in EIA issues and gain wide expertise on the EIA requirements, guidelines and good practices.

¹⁴ See also Pölonen *et al.* 2011 p. 127; Hokkanen & Jantunen 2012. This does not imply that there is no room and need for enhancing the Finnish EIA system. The call for improvements concern, in particular, systematic follow-up, better integration between EIA and the permit and land use planning schemes, and enhancing the quality of the information provided in the EIA. See Pölonen 2007 p. 281–294, Hokkanen & Jantunen 2012; Kokko 2013, *passim.*

In terms of the methodology for this research, we have used the basic legal-dogmatic approach, that is legal analysis of the proposed Directive and its comparison to the current one, and literature review. Furthermore, in order to better understand the developer perspective, we have conducted semi-structured interviews¹⁵ with companies in Finland. The representatives of the developers were asked the following general questions¹⁶:

- 1) How did they perceive the proposed changes to the EIA Directive compared to the existing state of law?
- 2) Would their business benefit or suffer from the proposed changes?
- 3) How should the EIA legislation be improved from their perspective?¹⁷

We will examine the proposal via those suggested changes of the EIA procedure which are most essential for the developers. In the begin-

¹⁵ We conducted seven interviews with representatives of companies covering several of the more prominent sectors in Finland. The interviewees include the following: General Counsel and Director of Legal Affairs for a hydropower company, President of Environment for an international EIA consulting company, Regional Director for Lapland for a Finnish engineering and environmental consultancy, Director of Water and Environment for an international EIA consulting company, Manager for Sustainability and Quality for an international mining company and two Environmental Managers for two different international mining companies. All of the interviewees are well-established professionals in their respective fields of expertise and in their companies as well. In addition, all seven representatives answered two rounds of questions (conducted April through October 2013), thus providing valuable insight into the actual practice of EIA in Finland.

¹⁶ The detailed list of questions is described in Annex I of this article.

¹⁷ The interpretation of this question is left open for the companies as ‘perspective’ could include everything from shortening the EIA process and reducing costs, to producing a more comprehensive and informative document, to encouraging a more inclusive process in terms of public participation.

ning of each section, the current state of EU law is briefly described. Section two analyses the proposed screening¹⁸ procedure for Annex II projects; Section three looks at the scoping¹⁹ process; Section four focuses on the duty of the developer to provide an environmental report and its relationship to the assessment of the competent authority; Section five discusses the integration of EIA with the other environmental assessments required under the EU legislation; and conclusions are presented in Section 6.

2. Screening of the Annex II projects

The current EIA Directive (Art. 2(1)) requires an EIA to be carried out for projects “likely to have significant effects on the environment.” These projects are defined in Article 4 which requires that projects listed in Annex I must be subject to EIA on a mandatory basis. Projects listed in Annex II must be made subject to screening where the need for an EIA procedure is decided. To facilitate the screening decision, the EIA Directive provides Member States discretion to determine the basis on which significant environmental effects should be identified.²⁰

The implementation of the screening requirement has resulted in a wide variation in the types and levels of thresholds or criteria set by Member

States.²¹ Case law indicates that, when establishing thresholds, Member States have quite often exceeded their margin of discretion, either by taking account of only some selection criteria in Annex III or by exempting some projects in advance. According to the European Court of Justice, the limits of the screening discretion are set out in Article 2(1).²² Furthermore, the court has given rulings on the information and reasoning to be included in the screening decision.²³

The Commission’s proposal includes renewal of the screening system. It aims at amending the EIA Directive taking into account the above-mentioned rulings of the Court of Justice. Moreover, the Commission’s purpose is to better address the emerging environmental challenges in the screening system (through increased Annex III criteria) and set time frames for the screening decision. Furthermore, the proposal intends to determine the division of labor between developer and competent authority in the screening phase.²⁴ The proposed Art. 4 and Annex III address these needs, but also go beyond them with the functions of the new Art. 4(3) and Art. 4(5c).

The new Art. 4(3) would introduce an early phase assessment requirement (a ‘mini-EIA’ type of process) for the projects listed in Annex II of the Directive.²⁵ If EIA is not required, the

¹⁸ In the context of environmental impact assessment, the concept of screening refers to a process by which a decision is taken on whether or not EIA is required for a particular project. See e.g. Commission 2001(a).

¹⁹ Scoping can be summarized as a process of “determining the content and extent of the matters which should be covered in the environmental information to be submitted to a competent authority for projects which are subject to EIA”. Commission 2001(b).

²⁰ Article 4(2) requires that Member States make the screening determination through 1) a case-by-case examination of projects, 2) thresholds and criteria set by the Member States; or 3) a combination of (1) and (2) above. When establishing those thresholds or criteria, Member States must take into account the selection criteria set out in Annex III.

²¹ Commission 2003 p. 33–41 and COM(2009) 378 final p. 5.

²² See e.g. C-72/95 (*Kraaijeveld and Others*), C-392/96 (*Commission vs. Ireland*) and C-486/04 (*Commission vs. Italy*), C-2/07 (*Abraham and Others*) and 427/07 (*Commission v. Ireland*).

²³ C-87/02 (*Commission vs. Italy*) and C-75/08 (*Mellor*).

²⁴ The current EIA Directive, and national legislation in some Member States, do not define who provides the information for the screening decision and this has caused, to an extent, legal unclarity. *Pölönen* 2007 p. 111–112. Therefore, in general, regulating the division of work in the screening phase seems well reasoned.

²⁵ The assessment would be based on the information provided by the developer. The required information contains the following elements (defined in the proposed new Annex II.A): a) a description of the project, b) a de-

screening decision must include a description of the measures envisaged to avoid, prevent and reduce any significant effects on the environment (proposed Article 4(5c)). An explanatory memorandum mentions two grounds for the proposed Art. 4(3) and Art. 4(5c). First, it reflects the Commission's presumption that EIA is too often prepared in cases where the current threshold of "likely significant environmental effects" has not been exceeded. According to the Commission, the amendments to the screening provisions "would ensure that EIAs are carried out only for projects that would have significant environmental effects, avoiding unnecessary administrative burden for small-scale projects."²⁶

In the Finnish context, this reasoning seems irrelevant since there is no empirical evidence that EIA would have been applied to too small activities in terms of environmental consequences. Studies rather indicate that the EIA requirement has not covered all projects which exceed the threshold.²⁷ In Finland, EIA has typically

description of the aspects of the environment likely to be significantly affected by the proposed project c) a description of the likely significant effects of the proposed project on the environment and d) a description of the measures envisaged to avoid, prevent or reduce any significant adverse effects on the environment.

²⁶ COM(2012) 628 final, Explanatory memorandum, p. 3 and 5. The Commission also states that the aim is to ensure that EIA is required only "when it is clear that there are significant environmental impacts". This type of approach is contrary to the precautionary principle, which is the central legal principle in EIA law, through the wording of Art. 2(1) of the EIA Directive, the case law of the European Court of Justice (*C-127/02, Waddenzee*) and Article 191(2) of the Treaty on the Functioning of the European Union.

²⁷ Käyhkö et al. 2007, *passim*. and Pölönen 2007 p. 258–270. There are cogent reasons to believe that Finland is not an exception in this respect. See e.g. *Stookes* (2003 p. 145) and *Cashman* (2004 p. 86–87) who doubt that the EIA requirement is widely circumvented in some project types such as agriculture and housing. See also *Krämer* (2012, p. 156) who argues that the rulings of the ECJ on the assessment requirement are rather frequently ignored in daily practice at the local and regional levels.

been applied only to those projects whose size is either comparable or close to the size of the projects listed in Annex I of the Directive and correspondingly the Annex I of the Finnish EIA Decree.²⁸ If the authority requires EIA for small- or medium-sized projects, which clearly have no significant environmental impacts, the developer can, and very likely will, successfully appeal the screening decision.

Second, the proposal's core idea is to enable project modifications in the early state of planning in order to eliminate the need for a full scale EIA. The Commission considers this a successful practice.²⁹ A similar regulatory approach has evolved through administrative practices in the U.S. when applying the National Environmental Policy Act of 1969 (NEPA). If an action is not listed as a categorical exclusion, an environmental assessment (EA) is typically prepared in order to determine the need for an environmental impact statement (EIS).³⁰ Federal agencies adopt mitigation measures as part of the environmental assessment in order to reduce adverse environmental impacts below the "significant" threshold (called a mitigated FONSI³¹).

The number of EISs conducted annually in the U.S. varied between 473–594 from 2000–2007³², whereas it has been estimated that 15 800 EIAs were conducted each year in the EU during

²⁸ Käyhkö et al. 2007, *passim*.

²⁹ COM(2012) 628 final, Explanatory memorandum, p. 5.

³⁰ See e.g. *Mandelker* 2010 p. 297. An EA, which has similarities with the assessment referred to in the proposed Article 4(3), is described in Section 1508.9 of the CEQ NEPA regulations. These regulations specify how agencies should carry out NEPA's statutory requirements. On the use of EA see also NEPA Task Force 2003 p. 65–70 and *Karkkainen* 2007 p. 57.

³¹ Finding of no significant effects. On the use of mitigated FONSI see also *Karkkainen* 2007 p. 57.

³² NEPANet: <http://ceq.hss.doe.gov/nepa/nepanet.htm> [12.3.2013].

the period 2005–2008.³³ The number of environmental assessments prepared in the U.S. has outnumbered the number of EISs by a ratio (approximately) of one hundred to one.³⁴ These figures support the often expressed view that there is a strong incentive for avoiding the NEPA process through a mitigated FONSI in the U.S.³⁵ A full EIA seems to be perceived by the agencies often as a threat rather than a useful tool for planning and public participation.³⁶

For the developer, EAs and mitigated FONSI, or similar arrangements now proposed by the EU Commission, can be seen as a cost effective means of environmental protection since they provide mechanisms for impact prediction and project redefinition in the early phase of planning without a heavy assessment procedure and hearings. In the optimal case, the prevention of significant environmental harms (the substantive aim of the EIA legislation) can be reached without extensive burden to agencies and delays caused by a full-scale EIA. However, the model contains structural deficiencies from the perspective of environmental effectiveness and public participation. Environmental assessment occurs outside of public scrutiny and the follow-up or verification of the accuracy of pre-project prediction is not required under the NEPA. As Karkkainen states: “NEPA thus assumes an unattainable level of clairvoyance at the pre-project state, and naively relies on the uncertain infor-

mation thus generated”.³⁷ The proposed EIA Directive seems to face similar challenges. The results of the assessment (Art. 4(3)) and mitigation measures described in the screening decision (Art. 4(5c)) are not supported by the monitoring requirement. Also the public has no opportunity for expressing views on the assessment and sufficiency of the mitigation measures adopted in the screening process.³⁸

The companies interviewed concur with the need for Member States to be given discretion over their individual screening systems and believe the current screening system in Finland works well. The only criticism has to do more with the competent authority in Finland rather than the system itself, as one company suggested that screening criteria is not consistently applied throughout the country. With respect to increasing the administrative burden³⁹ and lengthening the screening decision minimum time frame from the current one month in Finland to anywhere between three and six months⁴⁰, almost all of the companies expressed deep concern.⁴¹ The increased criteria (Annex III) for screening engendered less dismay although three out of seven companies did feel this would put an added burden on business.

³⁷ Karkkainen 2004 p. 350.

³⁸ For the controversial projects, lack of *ex ante* participatory procedures is not necessarily beneficial for the developer as it may increase the court proceedings (*ex post* participation).

³⁹ Specifically related to the competent authority's need for more capacity since there will be much more information (based on new Annex IIA.) during screening they will have to review.

⁴⁰ Based on the proposal (Art. 4(6)) the screening decision should be given within three months from the request for development consent and provided that the developer has submitted all the requisite information. The competent authority may extend the deadline by a further 3 months depending on the nature, complexity, location and size of the proposed project.

⁴¹ The proposal would not, however, restrict the possibility for maintaining the current Finnish time frame of one month.

³³ Impact Assessment accompanying the Commission's proposal (SWD(2012) 355 final, p. 66). According to the assessment document, this figure is subject to a high uncertainty. However, for the purpose of this paper, it gives sufficient indication of the volume of the EIAs in the EU.

³⁴ Karkkainen 2002 p. 909–910 and Mandelker 2010 p. 298.

³⁵ Blumm & Mosman (2012 s. 218) note that completing an EIS often takes years and requires resources. Thus agencies have an incentive to issue a FONSI whenever possible. See also e.g. Karkkainen 2002 p. 908 and Deacon 2003 p. 155–156.

³⁶ See also Karkkainen 2002 p. 936 and Karkkainen 2007 p. 58.

3. Scoping

The current EIA Directive contains very loose requirements on scoping. Article 5(2) of the EIA Directive requires only that competent authorities provide, if the developer so requests, an opinion on a list of the information to be submitted later by the developer.⁴² Thus, scoping is not mandatory under the current EIA Directive.

Based on the Commission's proposal, the scoping process would become obligatory. This is clearly a step in the right direction given the integral role of scoping in supporting the production of high quality EIA documents.⁴³ According to proposed Art. 5(2) the *competent authority* should, after having consulted the authorities referred to in Article 6(1) and the developer, determine the scope and level of detail of the information to be included by the developer in the environmental report.⁴⁴ Based on the proposal, the Directive would restrict the asking of further information from the developer for the scoping.⁴⁵

Thus, the proposal would introduce a scoping process where the developer is consulted but the 'plan' for the impact assessment, including the study of alternatives and public participation, would be prepared by the competent authority.

⁴² It is also required in Art. 5(2) that developer and relevant environmental authorities are consulted before the scoping opinion is given. Furthermore, the Directive allows Member States to make scoping a mandatory procedure, requiring competent authorities to provide a scoping opinion in all cases.

⁴³ On the significant role of scoping in aiding the quality of EIAs see e.g. *Wood* 2003 p. 159.

⁴⁴ In particular, it would be the task of the competent authority to determine: "(a) the decisions and opinions to be obtained; (b) the authorities and the public likely to be concerned; (c) the individual stages of the procedure and their duration; (d) reasonable alternatives relevant to the proposed project and its specific characteristics; (e) the environmental features referred to in Article 3 likely to be significantly affected."

⁴⁵ According to the proposal, subsequent requests to the developer for additional information could only be made if these are justified by new circumstances and duly explained by the competent authority.

From the Finnish perspective this would mean shifting the planning and management of EIA from the developer to the administration. In the current state in Finland, the developer prepares the first scoping document (so called assessment programme) which is rather an extensive plan for the impact assessment and public participation⁴⁶. The task of the competent authority⁴⁷ is to organize notification and hearings and give its statement on the assessment programme. The competent authority must require revisions to the assessment programme if needed (Section 9 of the EIA Act).

From the perspective of the Finnish system, the proposal seems to have more negative than positive impacts. The proposed scheme would likely mean a slower and more expensive scoping phase in Finland given that the developer has an economic incentive and more likely the capacity to prepare a scoping document promptly and cost-efficiently. The developer also has good knowledge of the project and the technically and economically feasible alternatives, which can be seen as an argument for developer-driven scoping.

The company viewpoint supports these conclusions as none of them favor transferring responsibility for the scoping process from the developer to the competent authority. The overriding concern for all of them is that the competent authority would not have enough resources and expertise to prepare the scoping report resulting in severe schedule delays. Given the likelihood that the competent authority would not have the capacity internally to assume this task, it is likely they would have to use the same consultants to prepare the scoping document as the companies use for their EIAs leading to less transparency

⁴⁶ Section 9 of the Finnish EIA Decree defines the minimum requirements for the assessment plan.

⁴⁷ The Centre for Economic Development, Transport and the Environment in its role of EIA liaison authority.

and probably not resulting in a higher quality scoping document. All of the companies favor the developer having a strong and active role throughout the scoping phase and think the current process in Finland is both effective and efficient.⁴⁸

Furthermore, there are reasons to doubt whether the proposed restrictions on the information requests to the developer would lead to a smarter EIA system. During a project's scoping phase, all of the relevant information should be used in order to prepare an adequate environmental report. Restricting the information flow in the scoping phase can lead to quality problems and delays in the environmental report phase. The Commission's authority-driven scoping model supports the objectivity of the scoping documents, but this element could be achieved with a less bureaucratic model whereby the authority has a duty for effective quality assurance instead of drafting the scoping document itself.

It is noteworthy that the proposal would also result in different scoping requirements for Annex I and Annex II projects because the scoping decision for Annex II projects would be based on information provided by the developer during the screening phase (proposed Art. 4(3) and Annex II.A). For Annex I projects, however, the authority could not ask the same information from the developer. There seems to be no grounds for such distinction (leading to unequal treatment) between the Annex I and II projects.

According to the proposal, the scoping decision should be integrated with the screening decision (proposed Art. 4(6)). Thus, there would

⁴⁸ Even so, there is still room for improvement as one of the companies asserted that the requisite information and the entire EIA sequence should clearly be discussed in the scoping document as there have been a number of cases when the "rules" were changed mid-way through the process. The other area that could be improved is the need for better addressing the study of project alternatives already in the scoping phase.

be no discretion on the timing of scoping for Annex II projects. Although this requirement aims at streamlining EIA, it may not be beneficial for all developers as they may have an interest in obtaining an early determination of their EIA obligation without having to begin the scoping phase at the same time. A requirement for simultaneous screening and scoping for Annex II projects would hinder the flexible timing of scoping based on the developer's project planning. This does not mean that integration would not be sensible in many cases. When asked if it is better to combine screening and scoping, the majority of companies agree that it is better to combine the two in terms of economy and in the interest of a faster process.

On balance, the Commission seems to propose rather inflexible frames for the scoping process, which do not allow for full utilization of a developer's expertise. For creating preconditions for a smart regulatory model, the EIA Directive should leave room for the national arrangements where the developer has an active role in the scoping phase.

4. Environmental Report and Assessment of the Competent Authority

The current EIA Directive contains loosely formulated obligations for Member States with respect to the information provided by the developer. Article 5(1) requires that the developer shall provide, in an appropriate form, the information in Annex IV *inasmuch as Member States consider* the information to be relevant and the developer may reasonably be required to compile this information. Member States may exercise this discretion when transposing Art. 5(1) into national law.⁴⁹

Article 5(3) contains a list of information which the developer is always obligated to pro-

⁴⁹ See case C-287/98, *Linster* (para. 37).

vide. At a minimum, the requisite information includes the following: a) a description of the project site as well as the design and size of the project, b) a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects, c) *the data required to identify and assess the main effects which the project is likely to have on the environment*, d) an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects and e) a non-technical summary of the information referred to in points (a) to (d). It is noteworthy that the current Art. 5(3) does not explicitly require the developer to assess the likely significant impacts but to only provide data needed for the assessment.⁵⁰

The Commission's proposal would maintain the requirement for the developer to submit environmental information, but its form and content would be specified and less discretion would be left to the Member States. The intent is to contribute to the completeness and quality of environmental reports while also adapting EIA to 'newer' environmental challenges such as biodiversity loss, climate change, disaster risks and the availability of natural resources, all which are worthy goals to include in EIA.

Under the proposed Art. 5(1), the environmental report would be based on the scoping and it would include the information that may reasonably be required for making informed decisions on the environmental impacts of the proposed project (taking into account the factors mentioned in the paragraph, such as current knowledge and assessment methods). The

detailed list of information to be provided in the environmental report would be specified in Annex IV.⁵¹

The headings of Annex IV include descriptions of the 1) project, 2) alternatives considered, 3) relevant aspects of the existing state of the environment and the likely evolution thereof without implementation of the project (baseline scenario), 4) aspects of the environment likely to be significantly affected by the proposed project, 5) the likely significant effects of the proposed project on the environment, 6) the forecasting methods used to assess the effects on the environment referred to in point 5, as well as an account of the main uncertainties involved and their influence on the effect estimates and selection of the preferred alternative, 7) the measures envisaged to prevent, reduce and, where possible, offset any significant adverse effects on the environment referred to in point 5 and, where appropriate, of any proposed monitoring arrangements, 8) an assessment of the natural and man-made disaster risks and risk of accidents to which the project could be vulnerable and, where appropriate, a description of the measures envisaged to prevent such risks, as well as measures regarding preparedness for and response to emergencies, 9) a non-technical summary of the information provided under the above headings and 10) an indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information and of the sources used for the descriptions and

⁵⁰ The wording of Article 5 is a result of the political controversy surrounding the Directive and it indicates tension between allowing Member States a certain degree of flexibility and ensuring the fundamentals of the EIA process are not thereby undermined or circumvented. *Tromans & Fuller* 2003 p. 100.

⁵¹ While the function of scoping is to determine the relevant issues to be addressed in the environmental report, some of the Annex IV information could therefore be paid less attention, or even scoped out, if it is deemed not relevant.

assessments made, as well as an account of the main uncertainties involved and their influence on the effect estimates and selection of the preferred alternative. Most of these elements to be addressed in the environmental report are more specifically defined in Annex IV.

These specifications would mean new requirements for the developer, such as a mandatory description of project alternatives considered, which includes the identification of the least environmentally impacting alternative.⁵² The wording is clearly more rigorous since the current Directive requires only an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects.⁵³

On the whole, the requirements for the developer would be significantly broader than in the current EIA Directive. At the national level, the change may appear small or even non-existent, if the legislation of a Member State already exceeds the minimum requirements of the EIA Directive. However, also in cases where the formulations of existing EIA legislation correspond with the proposal, relevant changes can still occur through new interpretations of the content requirements. When the sufficiency of the environmental report (or part of it) is a matter of EU law instead of national law, this will likely change the way the legal requirements of the EIA report evolve.⁵⁴

The interviewed companies have different interpretations of the proposed changes. One thinks that the additional content requirements would better meet the challenges of today while another company perceives them to be onerous (especially since an EIA Report can already run 900 pages) and too theoretical. There is a concern that a heavy burden will be placed on developers as they would have to study alternatives in much more detail even though only one option will be implemented. One company mentioned the need for a more standardized impact assessment methodology, and in general, companies seem to want a “tool box” of models and methodologies for impact analysis that they can access. Although the overwhelming consensus is that the additional content requirements would likely result in higher costs and a greater amount of time needed to produce the EIA Report, the majority of companies also hold the viewpoint that a better EIA benefits the project, the public, and the industry at large.

In addition to the developer’s duty to prepare an environmental report, the Commission’s proposal also includes an assessment duty for the competent authority which partially overlaps

courts have so far adopted a passive role in interpreting the content requirements for the environmental report and reviewing the adequacy of environmental reports in individual cases. The Finnish Supreme Administrative Court (SAC) has given significant weight to the opinion of the EIA liaison authority while reviewing the adequacy of the environmental reports. The case law of SAC refers to the view of the court that it is the liaison authority that controls the EIA quality in the first place. If the liaison authority considers that environmental impact studies are adequate, it is very unlikely the court will reverse the environmental permit decision on the grounds of poor EIA quality. *Pölönen* 2007 p. 181–184, 192–204 and *Pölönen & Koivurova* 2009 p. 384–386. The liaison authority system is a clear strength of the Finnish EIA regime because the authority coordinates the EIA process from the very beginning and thus developers are well informed throughout the process about the requirements and principles of EIA. *Pölönen et al.* 2011 p. 123. This also serves to reduce the role of the court in EIA issues.

⁵² Annex IV (point 2). See also recital (point 18) of the proposed Directive.

⁵³ Based on this requirement an environmental impact statement needs to cover only the alternatives which the developer has studied on his own initiative. See also *Sparwasser et al.* 2003 p. 168; *Kloepfer* 2004 p. 355, footnote 705; *Pölönen* 2006 p. 483 and *Krämer* 2012 p. 157.

⁵⁴ Furthermore, the national courts would approach the sufficiency and quality of an environmental report from a different angle if the requirements for the report are laid down more specifically at the EU level. In Finland, the

with the assessment requirements of the developer. According to the proposed Art. 1(2g), the concept of environmental impact assessment would include *an assessment by the competent authority*. This assessment is described in Article 3 which also would be subjected to changes.⁵⁵

In this respect the Commission is following the rulings of the Court of Justice. Particularly, in the case *C-50/09 (Commission vs. Ireland, para. 36–41)* it was clearly pointed out that Article 3 of the EIA Directive “makes the competent environmental authority responsible for carrying out an environmental impact assessment which must include a description of a project’s direct and indirect effects on the factors set out in the first three indents of that article and the interaction between those factors...”. According to the Court, this assessment obligation is distinct from the obligations laid down in Articles 4 to 7, 10 and 11 of the Directive.⁵⁶ Furthermore, the

Court stated that the competent environmental authority “may not confine itself to identifying and describing a project’s direct and indirect effects on certain factors, but must also assess them in an appropriate manner, in the light of each individual case”.

The ruling is surprising since the wording of the current EIA Directive does not support the Court’s interpretation.⁵⁷ First, the assessment duty of the competent authority is not explicitly mentioned in the articles of the EIA Directive which lay down duties for the Member States. Second, Art. 4 in particular states clearly that Annex I and II projects “shall be made subject to an assessment in accordance with Articles 5 to 10”. According to the wording of these articles, the requirement to provide information throughout the process rests with the developer. The assessment duty of the competent authority cannot be even indirectly derived from Articles 5–10. Third, Art. 3 is not referred to in Art. 8 where it is required that products of the assessment (results of the consultations and information provided by the developer) shall be taken into consideration in the development consent procedure. Based on the wording of the EIA Directive, it is hard to avoid the conclusion that the Court went too far, via its teleological interpretation, and created

⁵⁵ The proposed Art. 3 requires that the environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 11, the direct and indirect significant effects of a project on the following factors: (a) population, human health, and biodiversity, with particular attention to species and habitats protected under Council Directive 92/43/EEC and Directive 2009/147/EC of the European Parliament and of the Council; (b) land, soil, water, air and climate change; (c) material assets, cultural heritage and the landscape; (d) the interaction between the factors referred to in points (a), (b) and (c); (e) exposure, vulnerability and resilience of the factors referred to in points (a), (b) and (c), to natural and man-made disaster risks.” Article 3 does not explicitly mention that the assessment referred to in this provision is for the competent authority. However, this can be concluded from the wording of the proposed Art. 8 and case law of the Court of Justice (*C-50/09, Commission vs. Ireland* and *C-404/09, Commission vs. Spain*).

⁵⁶ Thus, the Court of Justice accepted the Commission’s view on the content of Art. 3 presented in its action against Ireland. It is interesting that the Commission did not present such interpretation of Art. 3 in its latest implementation report on the application and effectiveness of the EIA Directive (COM(2009) 378 final). Instead, the Commission (p. 5) stated that competent authorities

“are not obliged to draw specific conclusions from the findings of the EIA”.

⁵⁷ A majority of the EIA law literature has not suggested that Art. 3 lays down such a fundamental assessment duty for the competent authority described in the case *C-50/09*. See e.g. *Tromans & Fuller* 2003 p. 99–101, *Wood* 2003 p. 40–51, *Hörnberg Lindgren* 2005 p. 184–186 and *Jans & Vedder* 2012 p. 351–354. *Krämer* (2007 p. 133–134) is here an exception. He notes that an administration’s task to actually prepare an impact assessment can be indirectly derived from Art. 3. *Krämer* argues that the assessment of impacts would thus require “some form of an ‘assessment document’ which evaluates in detail all direct and indirect effects of the project”. See also *Krämer* 2012 p. 155.

new EIA requirements, which do not correspond with the intention of the EU legislature.⁵⁸

Consequently, the judgment can be subject to criticism from the perspective of the rule of law. The assessment duty of the competent authority can be only indirectly derived from the wording of Art. 3 while many other articles of the EIA Directive speak clearly against the interpretation of the Court. Such a fundamental assessment requirement demanding vast amount of administrative resources should have a clear statutory basis.⁵⁹ The judgment also causes legal uncertainty while resulting in overlapping regulation for countries where the developer has, consistent with the polluter pays principle, an extensive duty to assess and describe all relevant environmental impacts of the project based on Art 5(1) and Annex IV of the EIA Directive and national norms.

The Commission's proposal would reduce the duties of the competent authority following from the interpretation of Article 3 by the Court of Justice. While Art. 3 now requires, in light of case C-50/09, a description of a project's numerous "direct and indirect effects", the proposed Art. 3 calls for the identification, description and assessment of the *significant* effects. This is a very important repair which decreases the above-mentioned duplication in Member States where the developer has comprehensive assessment

duties. The proposed wording could be understood such that the competent authority would have a requirement to analyze and summarize the main results of the assessment process based on the environmental report, views of the public and other authorities, and its own expertise. This type of assessment of the competent authority seems well reasoned from the perspective of environmental and participatory functions of EIA. However, the wording of the Directive could more clearly distinguish the differences between the assessment duty of the developer and the duty of the competent authority for producing reasoned conclusions on the likely significant environmental effects.

5. EIA 'One-Stop Shop'

Within current EU law, integrating various assessments is, to a large extent, legally possible but not compulsory. EIA can be fully integrated with the consent procedures,⁶⁰ and a co-ordinated procedure involving EIA and SEA is legally possible if the processes occur simultaneously⁶¹. Furthermore, there are no legal obstacles for integrating an assessment under Art. 6 of the Habitat Directive (92/43/EEC) with the EIA procedure.

In order to avoid duplication of assessments, reduce administrative complexity and increase economic efficiency, the Commission's proposal (new Art. 2(3)) includes provisions that *require* the coordination of, or joint procedures for, impact assessments under the EIA Directive and

⁵⁸ On the restrictions of the purposive interpretation in the context of the EIA Directive see case C-275/09 (Brussels Hoofdstedelijk Gewest and Others, particularly paragraph 29): "...while it is established case-law that the scope of Directive 85/337 is wide and its purpose very broad [...], a purposive interpretation of the directive cannot, in any event, disregard the clearly expressed intention of the legislature of the European Union".

⁵⁹ It is also reasonable to ask how EIA harmonization in the EU should be done. It seems to us that this should be rather left to the preparatory work of the experts in EIA, and, ultimately, to the EU legislator. It is hard to see how the Court of Justice would be better equipped to develop the EIA system in the EU.

⁶⁰ Under the Art. 2(2) of the EIA Directive, the environmental impact assessment may be integrated into the existing consent procedures in the Member States. Furthermore, Art. 2(3) states that Member States may provide for a single procedure in order to fulfill the requirements of the EIA Directive and the requirements of IPPC-Directive (2008/1/EC) which is now integrated with modifications to the Directive on Industrial Emissions (2010/75/EU).

⁶¹ See Art. 11(2) of the Directive on the assessment of the effects of certain plans and programmes on the environment (2001/42/EC, SEA Directive) and Commission's guidance on the SEA Directive. Commission 2003 p. 50.

other EU legislation. The aim of the EIA 'one-stop-shop' model proposed by the Commission is well grounded. The environmental assessments related to one EIA project are often carried out at different levels and by different instruments. Clearer frames for the integration at EU level would be useful.

However, the proposed regulation would not fit well with the national EIA systems, such as the one in Finland, where the developer has the central role in producing and integrating different assessments. The Commission perceives environmental assessments as authority-driven processes only and proposes regulating the integration of the *assessments of the competent authorities*. This view does not accommodate situations where the assessments are produced by the developer and a joint or integrated procedure would be initiated and mainly carried out by the developer. For example, the developer can, under Finnish law,⁶² integrate the Habitat Directive assessment (Natura 2000 assessment) with the EIA process. This type of integration seems not to correspond with what the Commission is envisaging in its proposal.

In concept, the companies think the idea of a 'one-stop-shop' to be positive, but also note that sometimes it makes more sense to allow assessments to proceed along individual tracks. In terms of shifting the responsibility of integration from developer to the competent authority, every company interviewed feels it is a good idea as long as there is effective collaboration between the company and authority. The companies do not see their businesses being affected (indeed one company expressed the opinion that the Centre for Economic Development, Transport and the Environment already acts as a one-stop-shop), except for one, which thinks the proposed changes will result in a positive benefit. It

is noteworthy that positive responses are connected with authority-driven integration and not authority-driven assessments.⁶³

Given the diversity of planning, permit and EIA laws and practices in the Member States, there appears to be no rationale for regulating the integration procedure in a detailed manner via the EIA Directive. It seems sufficient that the EIA Directive regulates the opportunity for integrating diverse assessments by establishing joint or coordinated procedures. In any case, the integration should not be restricted to the assessments of the competent authorities but it should also include the assessments carried out by the developer.

6. Conclusions

This article has analyzed the EU Commission's proposed amendment to the EIA Directive and used the perspective of Finnish developers to illustrate the effects of the revisions on the private sector. The ultimate aims of the Commission's proposal are to streamline the EIA process and improve its capacities in terms of environmental protection. The proposal addresses these targets, to a large extent, by introducing more detailed EU level regulation, decreasing the discretion given to Member States, and increasing the duties for the administration and developer. Approval of the Commission's proposal would mean substantial changes to EIA law in the European Union. The most important changes, from the Finnish developer's perspective, would relate to a) new requirements and function of the screening procedure⁶⁴, b) obligatory, authority-

⁶² Section 65.1 of the Nature Conservation Act 1096/1996.

⁶³ See also p. 9 which illustrates the companies' deep concern that the competent authority would not have enough resources and expertise to prepare the scoping report resulting in severe schedule delays.

⁶⁴ The new screening model would foster project modifications in the early state of planning in order to eliminate the need for a full-scale EIA.

driven scoping, c) new content requirements for the EIA report and d) application of coordinated or joint procedures for integrating assessments issued by authorities.

The proposed screening model would mean benefits for the developer in terms of providing mechanisms for impact assessment, project re-definition and mitigation proposals in the early phase of planning, which could lead to an avoidance of a full assessment procedure. However, this scheme would not support the environmental and participatory functions of EIA, since the early assessment with project modifications would occur outside of public scrutiny and the verification of the pre-project predictions would not be required.

Most of the other amendments proposed by the Commission would serve the environmental objectives of the proposal but not the aim of streamlining. At least in Finland, due to the regulatory strategy and legal-technical choices adopted by the Commission, these changes would clearly increase the unnecessary administrative burdens. Environmental impact assessment is approached in the proposal as an authority-driven procedure rather than as an instrument that can be widely utilized by the developer as a planning and management tool.

The proposed EIA Directive would hamper the application of smart regulation to the EIA process such that the abilities, expertise and creativeness of the companies could not be fully utilized. At present, Finnish developers enjoy wide latitude in influencing how and when EIA is carried out as long as minimum requirements are fulfilled. The active role of the companies in the EIA regime reflects a smarter system, compared to the authority-driven model, as business enterprises have a clear incentive to produce EIA documents (including for the scoping phase) promptly and cost-effectively. The high quality of the documents can and should be efficiently

controlled by the environmental agency (or other independent body) with sufficient expertise, legal competence and resources.⁶⁵

The article has identified ways of improving the proposal from the developer's perspective without weakening the environmental and participatory functions of the EIA Directive. In general, the proposal could be improved by leaving more discretion to the Member States to choose the most suitable implementation models in each context.⁶⁶ The most important revision needs relate to scoping. The EIA Directive should leave more room for the national arrangements where the developer plays a more significant role in the scoping phase. Although a good idea in concept, the proposed EIA one-stop-shop model is also in need of further preparatory work. It would be sufficient that the EIA Directive regulates the opportunity for integrating diverse assessments. In the current form, the proposal would hinder the arrangements where the developer has a central role in producing environmental assessments and integrating different forms of assessments.

The article has also analyzed the overlapping assessment duties in the current EIA Directive, which are not caused by the legislature (wording of the Directive) but the Court's purposive interpretation (particularly in case *C-50/09, Commission vs. Ireland*). The Court of Justice has ruled that Article 3 is a fundamental provision which sets an extensive assessment duty for the competent authority. According to the Court, it is the duty of the competent environmental authority to identify and describe a project's direct and indirect environmental effects, and also to assess

⁶⁵ Broad public participatory rights (including access to justice) are also integral to contributing and controlling the quality of the EIA and they serve to balance, to an extent, the role of the developer.

⁶⁶ This would not entail less stringent requirements but more discretion on the regulatory techniques used to achieve the goals of the proposal.

them in an appropriate manner, in the light of each individual case. At the same time, the developer may have, depending on how the Member State has used its discretion under Art. 5(1), an extensive duty for assessing and describing all relevant environmental impacts of the project.

To avoid unnecessary administrative burdens and costs of the assessment process – both for the administration (direct costs) and the developer (delays and fees from the administration) and for incorporating the polluter pays principle fully into the Directive – the current content of Art. 3 should be changed. If extensive assessment requirements are laid down for the developer (proposed Art. 5 and Annex IV), and sufficient quality assurance mechanisms are in place, there is no need to simultaneously mandate an extensive assessment obligation for the competent authority. Instead, it would be sufficient that the Directive regulates the assessment requirement for the developer, and the duty of the competent authority to carry out or facilitate efficient and independent quality control and produce conclusions on the likely significant effects.

References

- Blumm, Michael & Mosman, Keith 2012. The Overlooked Role of the National Environmental Policy Act in Protecting the Western Environment: NEPA and the Ninth Circuit. *Washington Journal of Environmental Law and Policy*, 2012, Vol. 2:2, p. 193–234.
- Canter, Larry – Clark, Ray 1997. NEPA Effectiveness. *Environmental Impact Assessment Review*. Vol. 17, p. 313–327.
- Cashman, Liam 2004. Environmental Impact Assessment. A Major Instrument in Environmental Integration. In: *Europe and the Environment. Legal Essays in Honour of Ludwig Krämer*. Ed. Onida, Marco. Europa Law Publishing. Groningen, p. 63–90.
- CEQ 1997. The National Environmental Policy Act. A Study of Its Effectiveness After Twenty-five Years. Council on Environmental Quality.
- COM(93) 28 final – vol 12. Report from the Commission of the implementation of Directive 85/337/EEC. Brussels 2.4.1993.
- COM(2007) 23 final. Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Action Programme for Reducing Administrative Burdens in the European Union.
- COM(2009) 378 final. Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the application and effectiveness of the EIA Directive (Directive 85/337/EEC, as amended by Directives 97/11/EC and 2003/35/EC).
- COM(2012) 628 final. Proposal for a Directive on the European Parliament and of the Council amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.
- Commission 2001(a). Guidance on EIA. Screening. Available at: <http://ec.europa.eu/environment/eia/eia-guidelines/g-screening-full-text.pdf>.

- Commission 2001(b). Guidance on EIA. Scoping. Available at: <http://ec.europa.eu/environment/eia/eia-guidelines/g-scoping-full-text.pdf>.
- Commission 2003. Commission's Guidance on the implementation of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. Available at: http://ec.europa.eu/environment/eia/pdf/030923_sea_guidance.pdf.
- Commission 2010. Environmental Impact Assessment of Projects – Rulings of the Court of Justice. Available at: http://ec.europa.eu/environment/eia/pdf/eia_case_law.pdf.
- Commission 2013. Webpages of the European Commission (http://ec.europa.eu/smart-regulation/index_en.htm), visited September 10, 2013.
- Deacon, Whitney 2003. The Bush Administration's Attack on the Environment; Target: NEPA's Environmental Impact Statement. *Missouri Environmental Law and Policy Review*. Vol. 10, s. 147–157.
- GHK 2010. Collection of information and data to support the Impact Assessment study of the review of the EIA Directive. Final Report. A study for DG Environment.
- Gunningham, Neil & Grabosky, Peter 1998. *Smart regulation. Designing Environmental Policy*. Oxford University Press, Somerset.
- Gunningham, Neil 2011. Enforcing Environmental Regulation. *Journal of Environmental Law*. Vol. 23, p. 196–201.
- IAIA 1999. Principles of Environmental Impact Assessment Best Practice. International Association for Impact Assessment. Available at: http://www.iaia.org/publicdocuments/special-publications/Principles%20of%20IA_web.pdf
- HE 319/1993 vp. Hallituksen esitys Eduskunnalle laiksi ympäristövaikutusten arviointimenettelystä ja eräksi siihen liittyviksi laeiksi.
- Hokkanen Pekka 2007. *Kansalaisosallistuminen ympäristövaikutusten arviointimenettelyssä*. Acta Universitatis Tamperensis 1285. Tampere: Tampere University Press.
- Hokkanen, Pekka & Jantunen, Jorma. 2012. A Multi-view Evaluation of the Finnish EIA System – an 18-Year Success Story? *Journal of Environmental Assessment Policy and Management*. Vol 14, 1250024.
- Hörnberg Lindgren, Christina. Miljökonsekvensbedömningar som rättsligt verktyg för hållbar utveckling. *Juridiska institutionen skriftserie*, no 10/2005. Umeå Universitet.
- Jalava, Kimmo – Pasanen, Sanna – Saalasti, Mikko – Kuitunen, Markku 2010. Quality of environmental impact assessment: Finnish EISs and the opinions of EIA professionals. *Impact Assessment and Project Appraisal*. Vol. 28, p. 15–27.
- Jans, Jan & Vedder, Hans H.B. 2012. *European Environmental Law. After Lisbon*. Europa Law Publishing. Groningen.
- Jantunen, Jorma & Hokkanen, Pekka 2010. YVA-lainsäädännön toimivuusarviointi. Ympäristövaikutusten arviointimenettelyn toimivuus ja kehittämistarpeet. *Suomen ympäristö 18/2010*.
- Karkkainen, Bradley C. 2002. Towards a Smarter NEPA: Monitoring and Managing Government's Environmental Performance. *Columbia Law Review*. Vol. 102, p. 903–972.
- Karkkainen, Bradley C. 2004. Whither NEPA? *New York University Environmental Law Journal*. Vol. 12, p. 333–363.
- Karkkainen, Bradley C. 2007. NEPA and the curious evolution of environmental impact assessment in the United States. In: *Taking Stock of Environmental Assessment. Law, Policy and Practice*. Ed. Holder, Jane & McGillivray, Donald. Routledge-Cavendish. Abingdon.
- Kloepfer, Michael 2004. *Umweltrecht*. 3. Auflage. Beck Juristischer Verlag. München.
- Kokko, Kai 2013. Weighing environmental information and its sources in legal decision-making. In: *Miljörettsliga perspektiv och tankeväндor*. Vänbok till Jan Darpö och Gabriel Michanek. Ed. Gipperth, Lena – Zetterberg, Charlotta. Iustus Förlag. Uppsala, p. 285–317.
- Krämer, Ludwig 2007. The development of environmental assessment at the level of the European Union. In: *Taking Stock of Environmental*

Assessment. Law, Policy and Practice. Ed. Holder, Jane & McGillivray, Donald. Routledge-Cavendish. Abingdon.

Krämer, Ludwig 2012. EU Environmental Law. Seventh Edition. Sweet & Maxwell. London.

Käyhkö, Ulla-Riitta – Pölönen, Ismo – Grönlund, Elisabeth 2007. YVA-menettelyn soveltaminen yksittäistapauksissa. Soveltamisratkaisujen laatu ja yhtenäisyys 1994–2006. Suomen ympäristö 18/2007.

Mandelker, Daniel 2010. The National Environmental Policy Act: A Review of Its Experience and Problems. *Journal of Law & Policy*. Vol. 32, p. 293–312.

Ministry of Environment 2012. Ehdotus uudeksi ympäristönsuojelulaiksi (15.11.2012). Yleisperustelut.

NEPA Task Force 2003. Report to the Council on Environmental Quality. Modernizing NEPA Implementation.

Pölönen, Ismo 2006. Quality Control and Substantive Influence of Environmental Impact Assessment in Finland. *Environmental Impact Assessment Review*. Vol. 26, s. 481–491.

Pölönen, Ismo 2007. Ympäristövaikutusten arviointimenettely. Tutkimus YVA-menettelyn oikeudellisesta asemasta ja kehittämistarpeista ympäristöllisen vaikuttavuuden näkökulmasta. Suomalaisen Lakimiesyhdistyksen julkaisuja A-sarja N:o 280. Jyväskylä.

Pölönen, Ismo – Hokkanen, Pekka – Jalava, Kimmo 2011. The Effectiveness of the Finnish EIA system – What works, what doesn't, and what could be improved? *Environmental Impact Assessment Review*. Vol. 31, p. 120–128.

Pölönen, Ismo – Koivurova, Timo 2009. Rajat ylittävä ympäristövaikutusten arviointi – vaihtoehtotarkastelun riittävyys ja suhde lupapäätöksentekoon. *Lakimies* 3/2009, p. 371–393.

Sparwasser, Reinhard – Engel, Rüdiger – Voßkuhle, Andreas 2003. *Umweltrecht*. Mütler Verlag. Heidelberg.

Stookes, Paul 2003. Getting to the Real EIA. *Journal of Environmental Law*. Vol. 15, p. 141–151.

SWD(2012) 355 final. Commission staff working paper. Impact assessment accompanying the Commission's proposal for renewing EIA Directive (COM(2012) 628 final).

Tromans, Stephen – Fuller, Karl 2003. *Environmental Impact Assessment – Law and Practice*. Butterworth Environmental Law Series. Chippingham.

Wood, Christopher 2003. *Environmental Impact Assessment. A Comparative Review*. Second Edition. Pearson. Harlow.

Case law

European Court of Justice

C-72/95, Kraaijeveld and Others [1996], p. I-05403

C-392/96 Commission vs. Ireland [1999], p. I-05901

C-87/02, Commission vs. Italy [2004], p. I-05975

C-127/02, Waddenzee [2004], p. I-07405

C-486/04, Commission vs. Italy [2006], p. I-11025

C-2/07, Abraham and Others [2008], p. I-01197

427/07, Commission v. Ireland [2009], p. I-06277

C-75/08, Mellor [2009], p. I-03799

C-50/09, Commission vs. Ireland [2011], p. I-00873

C-275/09, Brussels Hoofdstedelijk Gewest and Others [2011], p. I-01753

C-404/09, Commission vs. Spain [2011], p. I-11853