The Relationship between the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 25 February 1991) and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 17 March 1992)

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The Relationship between the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 25 February 1991) and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 17 March 1992)

Introduction

Environmental impact assessments have emerged since the 1970ies as an important legal technique to integrate environmental considerations into socioeconomic development and decision-making processes. Under national legislation, environmental impact assessment procedures are widely considered useful, in certain cases, indispensable for a sound management of the environment. On the international level States are rather unwilling to assume strict environmental obligations on procedural matters. Accordingly they lean to incorporate them in bilateral or regional agreements, where the parties do not differ in their economic, political and cultural traditions.¹

Effective protection of transboundary watercourses and international lakes is only possible if States cooperate and establish common management. Therefore, States must carefully coordinate the EIA-procedures to avoid contradictions in the application. The Convention on Environmental Impact Assessment in a Transboundary Context takes care of these coordinative problems. Thus, it is the appropriate regulation to guarantee international cooperation for environmental impact assessments in the sector of transboundary watercourses.

This paper examines the relationship between the Convention on Environmental Impact Assessment in a Transboundary Context and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes. For this purpose **Chapter 1** briefly summarizes the two Conventions, their content and their main obligations. To determine the scope of each convention and to detect possible overlapping **Chapter 2** will present and compare the Conventions fields of application. The links between the contents, in particular the provisions regarding environmental impact assessments, of the two Conventions are the subject of **Chapter 3**.

Chapter 1 - Summary of the two Conventions

A EIA-Convention

The Convention on Environmental Impact Assessment in a Transboundary Context (after this referred to EIA-Convention) elaborated under the auspices of the United Nations Economic Commission for Europe (ECE), was adopted at Espoo (Finland) on 25 February 1991. It was signed by 29 countries² and by the European Community. The Convention will enter into force 90 days after the date of deposit of the sixteenth instrument of ratification, acceptance, approval

Pineschi, p. 485

Albania, Austria, Belarus, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Spain, Sweden, Ukraine, United Kingdom and United States of America

or accession. By August 1995 eleven countries³ had deposited their relevant instrument with the Secretary-General of the United Nations. Although the Convention has not yet reached force, Signatories already carry out some provisions on a bilateral or multilateral level according to the ECE Resolution on EIA in a transboundary context⁴.

I Content

The EIA-Convention contains a preamble, twenty articles and seven appendices, including a list of 17 activities to which the Convention applies⁵. The preamble sets out the **underlying principles**. These are primary the interrelationship between economic activities and their environmental consequences, the need to ensure environmentally sound and sustainable development, the need to consider environmental factors at an early stage in the decision-making process, EIA as a necessary tool to improve the quality of the information presented to decision makers and the need and importance of developing anticipatory policies and of preventing mitigating and monitoring significant adverse transboundary impact.

It **obliges** parties to evaluate the environmental impacts of a proposed activity at an early stage of planning⁶. It particularly commits parties to take all appropriate and effective measures to prevent, reduce and control significant adverse transboundary environmental impact from proposed activities that are likely to cause a significant adverse transboundary impact⁷.

II EIA-Procedure

The Convention sets out in detail the procedure of EIA required of the parties:

The Party of origin must **notify** any of the seventeen proposed activities listed in Appendix I which is likely to cause a significant adverse transboundary impact, as early as possible and no later than informing its own public, to any party that it considers may be an affected Party⁸.

The proponent of the activity has to work out an EIA- documentation with the content indicated in Appendix II. This draft has to be submitted to the competent authority⁹. Then the authority of the party of origin has to furnish the affected party with this documentation¹⁰. Based on the EIA- documentation the concerned parties shall enter into consultation¹¹. In the final

Albania, Austria, Bulgaria, Finland, Italy, Luxembourg, Netherlands, Norway, Republic of Moldova, Spain and Sweden

⁴ Doc. ECE/ENVWA/19

⁵ Appendix I to the EIA-Convention

⁶ Art. 2.7 of the EIA-Convention

⁷ Art. of the EIA-Convention

⁸ Art. 3. 1of the EIA-Convention

Art. 4. 1 of the EIA-Convention

Art. 4. 2 of the EIA-Convention

¹¹ Art. 5 of the EIA-Convention

decision parties shall take due account of the outcome of the EIA. This includes the EIA documentation and the result of the consultations¹².

The Convention includes some **mechanisms to prevent a dispute** about the application or interpretation of its provisions in art. 3. 7. If there is no agreement whether a significant adverse transboundary impact is likely to occur, any such country may submit the question to an inquiry commission established under Appendix IV.

Several provisions concerning **public participation** are especially interesting. Apart from the general obligation to establish an EIA procedure that allows public participation in art. 2.2, the Convention includes two more concrete provisions in art. 2.6, 3.8 and 4.2. According to these provisions the public in the affected area also has the right to be informed of and to participate in the assessment procedure, though it takes place in another country. The State of origin shall ensure that the opportunity provided to the public of the affected State is equivalent to that provided to its own inhabitants¹³.

An innovation of the EIA Espoo Convention is the provision of requirements on **post-project** analysis (after this PPA) and follow-up. Concerned parties can decide, at the request of any one of them, whether and to what extent they want to carry out a post project analysis. Such a study might contain the surveillance of the activity and determination of any adverse transboundary impact¹⁴. The objectives of a PPA are set out in Appendix V. They consist of monitoring compliance with authorization conditions and the effectiveness of mitigation measures, a management review and verification of past predictions. Where the PPA establishes reasonable grounds to conclude, that a significant adverse impact on the environment exists, the concerned parties must consult on "necessary measures" to reduce or eliminate the impact¹⁵.

The EIA Convention also provides for bilateral and multilateral cooperation. States shall carry out jointly the provisions and follow the elements set out in Appendix VI. Furthermore they shall base the development of research programmes on interstate collaboration (arts. 8 and 9). Institutional arrangements include an annual meeting of the parties, which will be charged with keeping the implementation of the Convention under review. A secretariat is established under the Executive Secretary of the ECE¹⁶.

B Water-Convention

The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (after this referred to Water-Convention) was drawn up under the auspices of the United Nations Economic Commission for Europe, and was adopted at Helsinki on 17 March 1992. It was signed by 25 countries¹⁷ and by the European Community before the period of signature

Art. 6. 1 of the EIA-Convention

¹³ Art. 2. 6 of the EIA-Convention

¹⁴ Art. 7.1 of the EIA-Convention

¹⁵ Art. of the EIA-Convention

¹⁶ Art. 13 of the EIA-Convention

Albania, Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland,

closed on 18 September 1992. As with the EIA Convention, it will enter into force 90 days after the date of deposit of the sixteenth instrument of ratification, acceptance, approval or accession. By August 1995, fourteen countries¹⁸ had deposited their relevant instruments of ratification with the United Nations Secretary-General.

I Content

The Water-Convention consists of a preamble, 28 articles and 4 appendices. It is divided into three parts: Part I contains provisions relating to all parties, Part II provisions relating to riparian parties and Part III deals with institutional and final provisions. In the preamble the parties emphasize the **goal** of the convention, that is to strengthen national and international measures in order to protect and manage ecologically transboundary waters, both surface waters and groundwaters. Art. 2 sets out the **general principles** that should guide the parties when implementing the convention. It considerately mentions the precautionary principle, the polluter pays principle and the requirement that water management should meet the needs of the present generation without compromising the ability of future generations to meet their own needs. Under the Water-Convention the parties accept a general **obligation** to take all appropriate measures to prevent, control and reduce any transboundary impact¹⁹.

Therefore Part I of the Convention encourages the adoption of **preventive measures** at source, such as emission limits for discharges from point sources based on the best available technology, authorizations for the discharge of waste water and monitor compliance therewith and water-quality criteria or water-quality objectives²⁰.

Part II of the Convention includes provisions for riparian parties, and goes some way towards the codification of regional rules as established by the treaties and arbitral awards identified earlier. Bilateral and multilateral cooperation is to focus on the development or adaptation of treaties in conformity with the basic principles of the convention, including the establishment of joint bodies to deal with specified catchment areas²¹. Riparian parties are also encouraged to cooperate through consultations, joint monitoring and assessment, and common research and development²². According to the provisions on public information relevant information must always be available to the public. This information shall embrace water-quality objectives, permits and their conditions, and the results of monitoring and assessment²³.

Meetings of the parties to be held at least every three years, with the assistance of a secretariat provided by UN/ECE will review the accomplishment of the Convention.

Portugal, Romania, Russian Federation, Spain, Sweden, Switzerland, United Kingdom

Albania, Estonia, Finland, Germany, Hungary, Luxembourg, Netherlands, Norway, Portugal, Republic of Moldova, Rumania, Russian Federation, Sweden, Switzerland

¹⁹ Art. 2. 1of the Water-Convention

²⁰ Art. 3 of the Water-Convention

Arts. 9.1 and 2 of the Water-Convention

Arts. 10 to 12 of the Water-Convention

Arts. 14 and 15 of the Water-Convention

The character of the Water-Convention is ambiguous. One might maintain that it should be qualified as a framework agreement.

Generally, a framework agreement sets out general obligations, creates the basic institutional arrangements, and provides procedures for the adoption of detailed obligations in a subsequent Protocol. Frequently, it will have one or more Annexes or appendices, which include scientific, technical or administrative provisions.²⁴

It is true, that the Water-Convention corresponds to several issues which are typical for a framework agreement. It gives general obligations (art. 2) and leaves the concrete accomplishment to the parties. Part II of the Water-Convention provides for arrangements between riparian parties, in order to further detail the general obligations. The Annexes to the Convention contain scientific²⁵ and technical provisions²⁶.

Nevertheless, other arguments might support the opposite opinion.

First, the Water-Convention does not refer to Protocols, which is a characteristic means to further specify general obligations in a framework agreement.

Secondly, the fact, that the Convention does not enter into detail is not necessarily an indication of its framework character. In fact, an international binding Convention cannot regulate in detail all transboundary waters and international lakes. Only on the basis of regional cooperation all characteristics of the watercourse can be considered. A sound management of transboundary waters therefore entails further agreements on a bi- or multinational level.

Finally, the wording of Part I and Part II of the Convention indicates, that the provisions set out in the Convention are meant to be legally binding. For instance, art. 2.2 stipulates that parties *shall* take all appropriate measures. Again, for an international Convention it is impossible to fix exactly which measures have to be taken by the parties.

In top of that, during the elaboration the Working Group discussed the introduction of the word framework into the title of the Convention, but finally decided not to do so.

Thus, the opinion seems to be justified, that the Water-Convention cannot be qualified as a framework Convention.

III Provisions concerning EIA

Two articles of the Water-Convention have direct refer to the application of EIA. Art. 3. 1 b compels parties to develop, adopt, carry out and, as far as possible, render compatible relevant legal, administrative, economic, financial and technical measures to prevent, control and reduce transboundary impact. In addition, it obliges all Parties to apply EIA.

The second explicit provision demanding EIA is article 9. 2 j. Under this stipulation, parties riparian to the same transboundary waters shall participate in the application of EIA relating to transboundary waters, according to appropriate international legislation.

²⁴ Sands, Principles of international environmental Law, p. 106

Annexes II and III Guidelines for developing environmental practices, and Guidelines for developing water-quality objectives and criteria

Annex IV sets out the technical procedures for the arbitration to a peaceful settlement of disputes

Chapter 2 - Comparison of the scope of the EIA- and the Water-Convention

This chapter will compare the scope of both conventions and endeavour to detect possible overlapping. For this end it illustrates the field of application by defining the key-terms of each convention. These are the *activities to which the conventions apply, transboundary effects* and the notion of *significance*. After this wording oriented approach the scope of the conventions will be further observed in refer to the starting-point at which their provisions enter into play. Finally, the chapter concludes with a short summary of the comparison.

A Definitions

First it may be stated, that the two Conventions stake out their area of application in a different way. The EIA-Convention as an integrating Convention determines its scope by characterizing the various activities, to which its provisions are applicable. The Water-Convention concentrating on transboundary watercourses rather refers to this sector in order to define its area of application. Consequently the key-definition for the EIA-Convention is the activity while transboundary impact constitutes the most important term for the Water-Convention.

I Types of activities to which the Conventions apply

1 EIA-Convention

According to art. 2. 2 the EIA-Convention is applicable to proposed activity when two conditions are fulfilled:

- 1. the proposed activity is listed in Appendix I and
- 2. the proposed activity is likely to cause a significant adverse transboundary impact.

Art. 1 (v) gives a general definition of *proposed activity*. According to this article a *proposed activity* means any new activity and any major change to an activity. A definition of major change cannot be found in the Convention. Therefore a judgement in the specific situation is necessary to find out when the change to the activity must be subject to an EIA.

To clarify the field of application Appendix I of the EIA Convention lists different activities to which the convention applies, such as large-diameter oil and gas pipelines, waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes and others. Many of these activities are fairly well defined, nevertheless words like *major*, *integrated* and *large* are also used to set a threshold for several activities. Determining these thresholds is often difficult due to differences in environmental, social and economic conditions in a geographical area under consideration.

This list of activities is not exhaustive. According to art. 2.5 parties shall enter into discussions on whether any other activity not listed in Appendix I should be treated as if it were listed.

2 Water-Convention

The Water-Convention does not contain a similar definition like *proposed activity* in the EIA-Convention. As a sectorial convention, it rather defines its field of application with the determination of the sector *transboundary waters*. According to art. 1. 1 of the Water-Convention *transboundary waters* mean any surface or ground waters that mark, cross or are located on boundaries between two or more States. This definition leads to the conclusion that the Water-Convention is applicable to every activity relating to the sector transboundary waters.

3 Interrelation

In the list of Appendix I of the EIA- Convention several activities relating to transboundary waters occur: large dams and reservoirs and groundwater abstraction activities with a certain

amount. These activities fall directly into the area of application of both, the EIA and the Water-Convention. This is the case also for other activities with a likely significant adverse impact relating to transboundary waters and not listed in Appendix I of the EIA- Convention, when the concerned parties so agree²⁷.

Furthermore activities listed in Appendix I with no direct reference to transboundary watercourses might indirectly change the conditions of them. An example might be a thermal power station situated on the border of a river. Often the water of the river is used to cool engines of the station. This might change the temperature of this part of the river, which might cause an adverse impact on the river's flora and fauna.

4 Recommendations

Concerning the determination of the threshold *major change* under the EIA-Convention Appendix I to the Convention listing activities necessitating EIA might assist. When the activity's circumstances are changed in a manner, that it reaches the scope of the activities listed, it may be treated accordingly.

For the water-related activities demanding an EIA according to the Water-Convention the actual regulation seems to be not clear enough. Because the EIA-Convention does not concentrate on transboundary watercourses its Appendix I does not cover all water related activities for which and EIA appears absolutely important. For the same reason it does not feature the possible consequences on transboundary waters that might have activities listed in Appendix I.

It is true that art. 2.5 of the EIA-Convention offers the possibility to add activities to the list in Appendix I. But the EIA for these is not mandatory. It rather depends on an additional agreement of the concerned parties.

In order to insure EIA for certain water-related activities, the Water-Convention might give itself a list of activities or encourage parties to agree upon such lists.

II Transboundary Impact

1 EIA-Convention

The EIA-Convention defines *impact* and *transboundary impact* separately. According to the broad definition of art. 1 (vii) *impact* means any effect caused by a proposed activity on the environment including human health and safety, flora, fauna, soil, air, water, climate, landscape and historical monuments or other physical structures or the interaction among these factors; it also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors. *Transboundary impact* in the sense of the EIA-Convention is determined as any impact, not exclusively of a global nature, within an area under the jurisdiction of a party caused by a proposed activity the physical origin of which is situated wholly or in part within the area under the jurisdiction of another party²⁸. In this way impacts of solely global nature are excluded. Therefore this definition rather concentrates on impacts of local or sub-regional character in the ECE region.

In order to define *transboundary impact* art 1 of the EIA-Convention follows a "two-step-approach": the proposed activity (first step) causes any effect on the environment of another party (second step). This approach has consequences on the starting-point of the entire EIA-

At. 2.5 of the EIA-Convention

²⁸ Art. 1 (viii) of the EIA-Convention

procedure settled in art. 3.1.29

2 Water-Convention

The Water-Convention defines *transboundary impact* in the single article 1.2. Its definition of *transboundary impact* is as broad as the EIA-Convention's definition including the various environmental sectors enumerated above.

But in contrast to the EIA-Convention the Water-Convention does not exclude expressively impacts of global nature. Possible global consequences might be caused by changes of the watercourse conditions that have an impact on the marine environment.

The wording of art. 1.1 of the Water-Convention is more restrictive than the relevant provision in the EIA-Convention. Not any effect, but only an adverse significant effect on the environment is included

Contrary to the EIA-Convention art. 1.2 of the Water-Convention follows a "three-step-approach" to determine the term *transboundary impact*: on the first step art. 1.2 mentions any human activity; secondly this activity must cause a change in the conditions of transboundary waters; finally on the third step this change has to lead to a significant adverse effect on the environment, including the various factors like human health, water, climate etc..

But this definition contains some terms that are not further specified. They cause uncertainties as to their precise meaning and to their appropriate interpretation.

What degree of *change* is included? One might maintain that *change* means any change regardless of its extend. The fact, that no further restrictive adjective such as *serious*, *important* or *significant* accompanies the term of *change* might favour this view.

To take the contrary point of view, one might stress the lack of feasibility to take into account every minor change of the conditions of a transboundary watercourse.

Another ambiguity causes the term of *conditions* of the watercourse. Does *condition* imply the quantity and the quality of the water? Does it contain further factors?

An answer to this question gives art. 9.2 (b) committing riparian parties to elaborate joint monitoring programmes concerning water quality and quantity.

The term *environment* also give rise to some uncertainties. Does it include the global environment? And the furthermore the environment of which country is focused?

In order to answer to the first question one might refer to phrase 2 of art. 1.2 which reads "Such effects on the environment include *inter alia* effects on the air, water and the climate." The allusion to these environmental factors approves the opinion that the global environment is included.

Concerning the second question one can include the environment of parties not riparian to the watercourse and even of non-parties to the Convention.

In order to strengthen the opinion, that **non-riparian parties**³⁰ are embraced in the definition, one might emphasise the fact, that impacts of global nature are not expressively omitted. In top

these consequences will be discussed in section B

that is the parties not bordering the same transboundary watercourse (art. 1.4)

of that art. 1.2 enumerates environmental sectors which do not necessarily belong to the environment of a riparian country such as air, water and climate.

Moreover, the Water-Convention not only deals with riparian parties but also contains provisions relating to all parties regardless of their placement to the watercourse³¹.

Support to the view, that even the environment of **non-parties** is included gives the definition of *transboundary watercourse*. This term is defined as any surface or ground waters which mark, cross or are located on boundaries between two or more States³². Consequently *transboundary impact* in the sense of art. 1.2. refers not only to effects caused to the environment of a party but also to those caused to the environment of a non-party to the Convention.

This argumentation might justify the conclusion that *environment* in the sense of art. 1.2 of the Water-Convention includes the environment of non-riparian parties and of non-parties to the Convention.

A further uncertainty arises from the implication of water in the definition. The wording water comprises not only inland watercourses but also the coastal area of the marine environment and even the high sea.

The belief that the marine environment is not included entirely in the term water, might support the objective of the Water-Convention. As indicates its title and its preamble the Convention's objective rather focuses on the protection and use of transboundary watercourses. And the end of these transboundary watercourses are defined in art. 1.1: "Wherever they flow directly into the sea, they end at a straight line across their respective mouths between points on the low-water line of their banks."

One might object, that the preamble mentions the marine environment. However, at this place parties rather aim the coastal area of the marine environment than the high sea³³.

From this follows, that water in the sense of the Water-Convention includes the coastal area of the marine environment but excludes the high sea.

Art. 9. 4 further supports this judgment. In accordance to this article the joint bodies of the riparian parties shall invite joint bodies, established by *coastal states* for the protection of the marine environment directly affected by transboundary impact, to cooperate in order to harmonize their work and to prevent, control and reduce the transboundary impact.

Art. 2.6. strengthens this opinion, even if it does not focus explicitly on coastal marine environment. Art. 2.6 formulates that riparian parties shall cooperate in order to develop harmonized policies, programmes and strategies covering the relevant catchment areas, or parts thereof aimed *inter alia* at the protection of the environment of transboundary waters or the *environment influenced by such waters, including the marine environment*. Usually transboundary watercourses influence mainly the coastal areas of the sea. With this reasoning one might conclude that the high sea is not *water* in the sense of the Water-Convention.

Finally, one might put forward a practical argument. As an international convention concentrating

Part I of the Water-Convention

³² Art. 1.1 of the Water-Convention

the preamble reads: "Emphasizing the need for strengthened national and international measures to prevent, control and reduce the release of hazardous substances into the aquatic environment and to abate eutrophication and acidification, as well as pollution of the marine environment, *in particular coastal areas*, from land-based sources, ..."

on transboundary watercourses, the Water-Convention probably is unsuited to the specific problems arising on the occasion of the protection of the sea. Anyway, many other international regulations are specialized in this subject.

Therefore the opinion, that the marine environment of coastal areas is included while the high sea is excluded by art. 1.2 might be justified.

To take the opposite point of view, that is art. 1.2 includes the hight sea, one might outline, that parties do only focus on the coastal marine environment. They emphasize the need to abate *inter alia* the pollution of the marine environment, *in particular* coastal areas, from land-based sources. But they do not expressively exclude the high sea.

3 Relationship

Convention comprises any impact without limitation. However, according to art. 2.2 of the EIA-Convention requiring the implementation of the conventions provisions only activities which are likely to have significant impact to the environment have to be subject to an EIA. Thus, the provisions of both, the Water- as well as of the EIA-Convention only apply to activities likely to cause an adverse significant transboundary impact to the environment.

Because the EIA-Convention does not apply to activities with solely global impact, water-related activities with a likely impact on the global environment have to be subject to another international EIA-regulation.

4 Recommendations

In the Water-Convention the indistinct terms, like *change*, *conditions*, *environment* and *water*, should be clarified.

The definition of *change* of the conditions should be in accordance with other international regulations. It should also take into account parties' reluctance if the threshold is settled too low. As to the definition of *environment*, it should be clarified in particular whether the global environment is included.

III Definition of significance

The answer to the question at which degree an activity is likely to cause a significant impact on the environment is one of the most delicate problems. As the Convention's scope reaches various areas and activities with each different characteristics, it is not possible to give a general definition of significance or to establish generally acceptable criteria on significance in advance. The conclusion that an adverse transboundary impact is likely to be significant will rather be based on a comprehensive consideration of the characteristics of the proposed activity and its possible impacts, so that an element of appreciation always enters into play. At the same time the question of significance is the key decision of whether or not the Conventions are applicable. Therefore several provisions assisting the applicant in the determination of the term seem to be necessary.

1 EIA-Convention

The response of the EIA-Convention is not the definition of the term *significant impact* or *criteria* to facilitate the interpretation of it. Only *impact* and *transboundary impact* are defined in art. 1 (vii) and (viii). However, it contains other provisions to avoid an arbitrary decision.

One provision is the Appendix I to the Convention listing activities which might be considered

to have a significant impact on the environment.

A second stipulation is art. 3.1 of the Convention demanding **notification** of every significant impact. According to this article, it is up to the party of origin to decide whether there is, and which party may be affected by, a significant impact caused by the proposed activity. But the party of origin has to notify the affected party every time that it considers the activity likely to cause a significant impact to the environment.

A further provision is the **inquiry commission** established in art. 3.7. As the decision of the party of origin solely reflects its own opinion, it might provoke disputes whenever another party considers it would be affected by a significant adverse transboundary impact and no notification has taken place. That is why art. 3.7 supports that concerned parties, at the request of the affected party, enter into discussions to settle the question.

If those parties cannot agree, any such party may submit that question to an scientific inquiry commission further described in Appendix IV.

But the EIA-Convention contains only one arrangement - Appendix III - that might assist the parties in their considerations whether or not an impact would be likely to be significant. Appendix III sets forth a **general guidance** for identifying criteria to determine significant adverse impact for activities not listed in Appendix I, such as size, location and effects of the proposed activity³⁴. These criteria might also be expected to help settle the question of significance. But meant to be a general guidance these principles are defined very vaguely, so that thresholds like area with special environmental sensitivity or importance and activities which are large for the type of the activity have to be determined. Thus, these principles offer little assistance for the interpretation of the term significance.

2 Water-Convention

Although the term of significance is used to define *transboundary impact* in article 1.2., the Water-Convention itself remains completely silent on the question what significant impact means. Therefore the term is fully left to interpretation.

3 Relationship

In their coordination concerning the term significant no contradiction arises between the two Conventions

4 Recommendations

The absence of criteria assisting the decision-maker of the party of origin to settle the question of significance might postpone the realization of the EIA. The decision to notify an adverse transboundary significant impact to the likely affected party is the heart of the EIA process in a transboundary context. Therefore, such a delay might even endanger the effectiveness of the whole EIA.

For this reason the identification of likely transboundary impacts and the determination of significance for the purpose of transmitting the notification to the affected country should be set in a general framework, which would give a structured starting-point for further discussions

Art. 2.5 with Appendix III paragraph 1 of the EIA-Convention

between the competent authorities in the country of origin, the proponent and the affected country.

In addition, parties should establish common threshold levels in bilateral and multilateral agreements according to art. 8 of the EIA-Convention.

Furthermore, experience gained during the interim implementation pending the EIA-Convention into force should be used to find appropriate threshold levels for the qualification of an impact. In this context the due realization of post-project analysis provided in art. 7 of the EIA-Convention becomes especially important.

In addition to experience gained during the interim implementation, one could also learn from the accomplishment on the national level. Here, various approaches to determining the significance of an impact have been developed, as for example so-called "positive lists" enumerating activities considered a priori to have a significant adverse impact.

For further recommendations one should consult the **report** Particular questions of methods concerning environmental impact assessment in a transboundary context³⁵ of the ECE secretary. This report gives several proposals how to improve the identification of proposed activities listed in Appendix I to the EIA-Convention which have to be subject to an EIA and how to facilitate the determination of significance of a transboundary impact.

For instance, it recommends to further precise the **specific thresholds** for activities listed in Appendix I to the EIA-Convention necessitating an EIA, such as *major* and *large*. For this purpose the report³⁶ offers some types and parameters for each listed activity that might be taken into account.

Regarding the determination of significance of an impact, **examples** of the main types of emission and other causes of impacts³⁷ are given. These might give a more precise guidance for the qualification of an activity's likely impacts than the general principles indicated in Appendix III to the EIA-Convention.

The report proposes *inter alia* a systematic analysis of **other relevant international instruments**, where more specific catalogues of activities can be found. Possible relevant instruments are listed in Appendix V to the report.

B Starting-point of the EIA-procedure

The definitions determine fairly well the scope of the two Conventions, so that the applicant knows more or less exactly what kind of activity has to be subject to an EIA. Anyway, it does not give a response to the question at which point of the planning process an EIA has to be projected.

I EIA-Convention

Art. 3.1 of the EIA-Convention corresponds to the "two-step-approach"³⁸ to settle the point at which an EIA has to be taken into account: the notification as first stage of the EIA-procedure has to be made if the proposed activity is one of those listed in Appendix I (first step) and if it is likely to cause a transboundary adverse significant impact on the environment (second step).

³⁵ Doc. ENVWA/WG. 3/R.13

Appendix I to the report; p. 11

Appendix III to the report

³⁸ see section A II 1

Thus, the EIA-procedure starts at the point when the assessment of the probable consequences leads to the conclusion that there might arise a transboundary adverse significant impact on the environment.

II Water-Convention

In the Water-Convention the settlement of the starting-point for the EIA-procedure appears more complicated, because the Water-Convention itself gives no mention to the EIA-procedure. Therefore it does not contain a similar provision to art. 3.1 of the EIA-Convention fixing in particular the starting-point of the EIA-procedure.

Nevertheless, art. 3.1 (h), demanding EIA to prevent, control and reduce transboundary impact, together with the definition of *transboundary impact* in art.1.2 might lead to a reasonable conclusion. Art. 3.1 (h) follows a preventive approach to protect transboundary watercourses. Accordingly, the EIA has to start at an early stage of the planning-process so that prevention of adverse environmental consequences is possible.

This early stage is described more precisely in art. 1.2 giving the definition of *transboundary impact*. This article follows the "three-step-approach"³⁹ to define relevant environmental consequences of a proposed activity. According to this definition the starting-point of the EIA-process might be either the likelihood of a significant adverse effect on the environment or the change of the conditions of the watercourses.

Several grounds could be found to take the likelihood of significant environmental impact as the starting-point for the EIA-procedure. First, the draft framework convention of the 15 of march 1990 ⁴⁰ defines *impact* as any *significant* adverse environmental change or changes in conditions of transboundary waters affecting or likely to affect several environmental sectors.

Furthermore the starting-point of the EIA-procedure in other ECE regulations, such as the EIA-Convention and the Convention on transboundary impacts of industrial accidents, also refer to the likely significant impact of the proposed activity. In preparing the draft elements of the Water-Convention the working party explicitly remarks that the convention would be without prejudice to any other international legally-binding document existing or that being elaborated. This reasoning is reflected in the wording of art. 9.2 (j), stipulating that riparian parties have to participate in EIA in accordance with appropriate international regulations.

In addition, the sense and the effectiveness of the EIA might be threatened if there is no limiting threshold like *serious* or *significant*. The financial, human and time effort for a complete EIA seems to be exaggerated if the expected impact is only a minor one. Proponents of activities might consider such costs or delays as unnecessary burden and consequently become reluctant to undertake carefully the EIA-procedures.

Contrary to this argumentation one might maintain, that any change of the watercourses conditions already constitutes the likelihood of a significant adverse impact on the environment. For this understanding the starting-point of the EIA-procedure would be any change of the watercourses conditions.

This point of view can be supported by the fact that the parties amended the definition of impact

see section A II 2

⁴⁰ Doc. ENVWA/WP.3/R.17, p. 2

⁴¹ ENVWA/WP.3/R.17, p. 2

in the draft framework convention and preferred the "three-step-approach" of the actual art. 1.2. In fact, even small changes of the watercourse can have a huge effect on the environment. Consequently, the working party intended to adapt the definition of *transboundary impact* to the characteristics of the protection of transboundary watercourses.

III Relationship

If the starting-point to carry out an EIA is settled in such a way that any change of the watercourse's conditions is relevant, there might arise a contradiction to the EIA-Convention requiring the likelihood of a significant impact on the environment.

IV Recommendations

At a suitable place the starting-point of the EIA-process in the Water-Convention should be further clarified. In doing so one should take into account other international regulations in order to avoid contradictions.

E Summary

When a proposed activity is listed in Appendix I and is likely to have an adverse significant impact on transboundary watercourses, the scopes of the two Conventions overlap and the provisions of both Conventions apply.

Art. 9. 2 (j) of the Water-Convention requiring the participation in the implementation of environmental impact assessments relating to transboundary waters refers to other appropriate international regulations, such as the EIA-Convention. Thus, if the conditions of the EIA-Convention are fulfilled, the whole EIA procedure for a proposed activity relating to transboundary watercourses follows the mechanism set forth in this regulation.

This is the case for activities likely to have significant impact (directly and indirectly) on transboundary watercourses and listed in Appendix I to the EIA-Convention.

But activities with likely significant impact that are **not listed in Appendix I** to the EIA-Convention escape its mandatory procedure. In accordance with art. 2.5 of the EIA-Convention concerned parties are free to add activities necessitating an EIA provided that this is in accordance with existing international law.

Chapter 3 - Links between the EIA- and the Water-Convention

Obviously, the link between the EIA- and the Water-Convention is the environmental impact assessment. To reach an appropriate protection of transboundary watercourses the Water-Convention contains the specific commitment for parties to undertake environmental impact assessment, both on the national and on the international level. Apart from this, several other requirements might be fulfilled with the use of environmental impact assessment, such as the proper elaboration of quality-objectives and waste-water discharges. These direct and indirect links between the two Conventions will be examined in the first part of this chapter.

Furthermore both Conventions contain provisions concerning the public and provisions treating a kind of assessment posterior to the realization of a proposed activity (monitoring in the Water-Convention and post-project-analysis in the EIA-Convention). The relationship between these provisions will be discussed at the end of the chapter.

A EIA- procedure for transboundary waters

I Arts. 3.1 (h) and 9.2 (j) of the Water-Convention

The Water-Convention contains two arrangements treating the EIA for transboundary waters:

arts. 3.1 (h) and 9.2 (j).

According to art. 3.1(h) parties shall develop, adopt, implement and, as far as possible, render compatible relevant legal, administrative, economic, financial and technical measures, in order to ensure, *inter alia*, that environmental impact assessment and other means of assessment are applied. With this provision the Water-Convention commits parties to take measures on the national level *individually*.

The question might arise what EIA in this article means, that is what kind of impact the parties have to consider under this provision. It might be limited on impacts with only national extent, as art. 3.1 deals with measures taken on a national level.

However, the fact, that the EIA-mechanism is a national one⁴² does not mean that parties can neglect every consequence going beyond their boundaries. On the contrary, more arguments can be found to support the belief that impacts going beyond the national frontiers are included. First, the provision figures in a Convention treating transboundary waters. Secondly, art. 3.1 expressively stipulates, that parties shall take national measures to prevent, control and reduce transboundary impact.

In top of that, apart from the principles expressively referred to in art. 2 of the Convention⁴³, several principles underlay the Convention that strengthen the view that art. 3.1 commits parties to pay attention to likely transboundary impacts of activities undertaken under their jurisdiction. The preamble refers to documents requiring parties to bear in mind *inter alia* the principle of due diligence and the principle of good neighbourliness⁴⁴. According to the principle of due diligence states have sovereign rights over their natural resources but at the same time must not cause damage to the environment. As a basic obligation underlying international environmental law it now reflects a general rule of customary international law.⁴⁵

As to the principle of good neighbourliness it is traditionally considered by reference to the application of the maxim sic utere tuo, ut alienum non laedas. 46 Together the principle of due diligence and good neighbourliness commit states to use their natural resources with regard to its own as well as to the environment of its neighbour-state.

Thus, the opinion might be justified, that environmental impact assessment in the sense of art. 3.1 not only regards impacts with national but also with transboundary extent.

as defined in art. 1 (vi) of the EIA-Convention

such as the precautionary principle, polluter-pays principle, principle of equitable use, and the principle to bear in mind the future generation as well as the very basic principle of reciprocity and good faith

The preamble mentions the Principle 21 of the Stockholm Declaration on the Human Environment and the ECE Decision on Principles regarding Co-operation in the field of Transboundary Waters (Decision I (42)) § 1, which precise the content of the principle of due diligence.

For the principle of good neighbourliness the preamble refers also to the ECE Decision on Principles regarding Co-operation in the field of Transboundary Waters (Decision I (42) § 2a.

⁴⁵ Sands, p. 62

⁴⁶ Sands, p. 63

The international level is reflected in art. 9.1, calling for international co-operation: Riparian parties shall enter into bilateral and multilateral agreements in order to cooperate and harmonize their conduct. The specific commitment to undertake EIA is set forth in paragraph 2 (j) of art. 9, according to which the agreements shall provide for the establishment of joint bodies that shall *inter alia* participate in the implementation of environmental impact assessments relating to transboundary waters, in accordance with appropriate international regulations.

In this second provision the Water-Convention calls for EIA that parties have to carry out *jointly*. For this reason art. 9.2 (j) refers to other international regulations.

However, this reference to international regulations entails some difficulties. First, which international regulations should be applied? During the discussion concerning the elaboration of the Water-Convention the Working Party on Water Problems expressively mentioned the ECE EIA-Convention as well as the ECE Convention on the transboundary impacts of industrial accidents which were under preparation. ⁴⁷ Apart from these two instruments the EEC Council Directive 85/337 on the assessment of the effects of certain public and private projects on the environment and bilateral or multilateral agreements such as the Rhine Action Programme (1987) have the same regional scope. The future UN Framework Convention on the law of the non-navigational uses of international watercourses which is still under elaboration in the UN International Law Commission might also constitute an appropriate international instrument, focused in art. 9.2 (j) of the Water-Convention.

A second uncertainty arises from the term *in accordance with* international regulations. This might call for the application of the entire procedure set forth in the pertinent instrument. Just as well this term might commit parties only to implement parts of the pertinent provisions.

The Water-Convention lacks any provision regarding the EIA-procedure. This might justify the opinion that the entire mechanism of the pertinent international regulation is applicable. And again it is the discussion during the preparation of the Water-Convention that furnishes backing arguments. The Working Group on Transboundary Waters discussed the integration of more detailed EIA-provisions. But finally they decided not to include regulations concerning EIA in order to avoid overlapping with other regulations and because such provisions were considered to be too detailed for the Water-Convention.⁴⁸

Thus, it might be concluded that, with respect of characteristics of transboundary watercourses that might require unique remedies to surmount environmental problems, the procedures of the pertinent regulation is entirely applicable.

A third problem might occur as to the coordination between the international regulations. Do they contain contradictory provisions and if so how shall they be handled?

An example might be the coordination between the EIA-Convention and the EEC Directive 85/337. The EIA-Convention provides for a compulsory duty of prior EIA for a wider range of activities than those listed in Annex I to the EEC Directive. In exceptional cases, EEC States are allowed to exempt a specific project wholly or in part from the provisions of the Directive⁴⁹, while the EIA-Convention does not explicitly admit general exceptions to its provisions. According to the EEC Directive, Member States are entitled to exclude public participation not only, as under

⁴⁷ Doc. ENVWA/WP.3/7, p. 2 para. 9

Doc. ENVWA/WP.3/7, p. 2 para. 10; Doc. ENVWA/WP.3/R.18, p. 27 comment of the Turkish delegation

⁴⁹ Art. 2.3 of the EEC Directive 85/337

the EIA-Convention, in order to respect industrial and commercial secrecy or national defense purposes, but also for *the safeguarding of the public interest*⁵⁰.

The problems of coordination between the two instruments were practically resolved by the Community on 26 February 1991, when it declared, upon signature of the EIA-Convention "....in their mutual relation, the Community Member States will apply the Convention in accordance with the Community's internal rules...". In principle, this reservation excludes *ipso facto* the application of the EIA-Convention within the Community's area even when the latter provides for stricter obligations than the EEC Directive.⁵¹

Finally the Water-Convention remains silent on the question how often the EIA-procedure should be implemented. There is no similar provision to art. 4.4 of the Convention on the Transboundary Effects of Industrial Accident, that declares EIA undertaken in order to comply with the EIA-Convention sufficient for its own requirement of EIA.⁵² Therefore the Water-Convention leaves completely open the relationship between the EIA-procedures established by the pertinent international regulations.

II Recommendations

To avoid contradictions between the applicable international regulations their scope should be further examined and compared so that possible overlapping can be revealed. The relationship between them should be illuminated. A possible measure might be the introduction of a provision similar to art. 4.4 of the Convention on the Transboundary Effects of Industrial Accidents.

B Which requirements of the Water-Convention can be fulfilled by EIA?

As a scientific and technical procedure investigating the environmental impact of human activity EIA not only influences directly the decision-making process whether or not to proceed with an activity. Moreover, they might contribute indirectly to a well considered decision if water management measures like water-quality objectives and licensing systems are based on EIAs. The paper on Environmental impact Assessment and Water Management: Policy issues in the ECE Region⁵³ illustrates how to use EIAs in order to fulfill these two essential requirements of the Water-Convention.

I EIA and water-quality objectives

Water-quality objectives are increasingly used as an important policy instrument to prevent,

Art. 10.1 of the EEC Directive 85/337

Pineschi, p. 489

Art. 4.4 of the Convention on the Transboundary Effects of Industrial Accident reads: "When a hazardous activity is subject to an environmental impact assessment in accordance with the Convention on Environmental Impact Assessment in a Transboundary Context and that assessment includes an evaluation of the transboundary effects of industrial accidents from the hazardous activity which is performed in conformity with the terms of this Convention, the final decision taken for the purposes of the Convention on Environmental Impact Assessment in a Transboundary Context shall fulfill the relevant requirements of this Convention."

see reference in the bibliography

control and reduce pollution in internal and transboundary surface waters. Therefore the Water-Convention repeatedly refers to water-quality criteria and objectives ⁵⁴. Because the setting of such objectives is a complex process the paper referred to recommends to base the process on EIA in a given catchment area. ⁵⁵ In the paper two advantages are emphasized. The use of EIA in the overall process would increase the reliability of assumptions made and results achieved. In addition, it would help in the decision-making process on whether or not a total or partial ban on the production and use of hazardous substances should be imposed, because the EIA may show that the quality of the waters or the ecosystem so requires. ⁵⁶

Even if this idea has not yet taken on, it might be interesting to look at the legal point of view of using EIA for specific water management measures. Two questions might arise: Does the Water-Convention contain any provision on which the use of EIAs for water-quality objectives can be based? And secondly, which EIA-procedure should be applied?

In order to answer to the first question, it seems convenient to recall the wording of arts. 3.1 (h) and 9.2 (j). Both provisions only require the implementation of EIA for the purpose to prevent, control and reduce transboundary impact without indicating in which process and at which stage. Thus, the wording includes any use of EIA, either in the *ordinary* way, that is the integration of its results into the decision-making process whether or not to proceed with a proposed activity, or its use for setting water-quality criteria and objectives.

Moreover, one provision in the EIA-Convention might strengthen the view that the use of EIA for water-management measures are included in arts. 3.1 (h) and 9.2 (j) of the Water-Convention. As indicated earlier the Water-Convention refers to other international regulations relating to EIA, in particular to the EIA-Convention. According to art. 2.7 phrase 2 of the EIA-Convention, parties shall, to appropriate extent, endeavour to apply the principles of environmental impact assessment to policies, plans and programmes. The setting of water-quality objective as an important policy instrument can be ameliorated by the use of EIA, as shown above. Therefore their use for this process seems to be appropriate.

Further support can be found in the preamble of the EIA-Convention. At this place parties confirm the need to give explicit consideration to environmental factors at an *early stage* in the decision-making process by applying EIA, at *all appropriate administrative levels*. The establishment of water-quality criteria and objectives is the most early stage in the decision-making process because these objectives are set on a stage where the possibility of any likely adverse impact on the environment has not yet occurred. Therefore this very early stage to undertake EIA might be considered as an appropriate level in the sense of the EIA-Convention. However, the use of EIA at this early level is not mandatory under the Water-Convention. But parties might conclude further agreements in order to develop the process of setting the objectives according to arts. 12, 9.2 (e).

As to the second question, which procedure should be used, one can again refer to art. 2. 7 phrase 2 of the EIA-Convention. In accordance with this provision it is sufficient to only use the *principles* of EIA when they are used for policies, plans and programmes.

Arts. 3.2, 9. 2 (e), 12, 16.1 (c), Annex III of the Water-Convention

⁵⁵ Schrage/Enderlein, p. 23

Schrage/Enderlein, p. 24

Indeed, applying the entire EIA-procedure with notification, consultation between parties etc. on a level, where an adverse environmental impact is not even likely to ocurr, might rather harm than help. Therefore the procedure of EIA should correspond to such an early level. Again such a corresponding procedure might be adopted by bi- and multilateral agreements according to arts. 12, 9.2 (e) of the Water-Convention.

II EIA and licensing waste-water discharges

Licensing waste-water discharges into rivers and lakes is another basic tool to ensure the protection, conservation and restoration of waters. The Water-Convention mentions it in arts. 3.2 and 9.2 (d). The decision to grant or refuse a permit for waste-water discharge requires adequate information on the characteristics of the installation, which must be provided by the operator. For this reason the paper mentioned earlier stresses the need for a sound licensing system to be based on case-by-case consideration of emission sources and on the outcome of impact assessments. Furthermore it recommends to introduce EIA as an integral part of permit applications, if the expected discharges may have a significant impact on the environment⁵⁷.

In this context again the question of legal basis and the question referring to the extent of the EIA-procedure arise.

One might correspondingly through the linking art. 9.2 (j) of the Water-Convention refer to art. 2.7 phrase 2 of the EIA-Convention.⁵⁸ With the reference to this provision parties only have to apply the principles of EIA.

Another possibility might be to outline the similarity to some activities listed in Appendix I of the EIA-Convention, such as waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes. According to art. 2.2 of the EIA-Convention parties then would have to undertake the entire EIA-procedure. But, as Appendix I does not include waste discharge into watercourses, the EIA-procedure would only bind parties, if they agree to do so⁵⁹. However, riparian parties might conclude agreements demanding EIA for the elaboration of discharge limits.⁶⁰

III Recommendations

With the present regulation the use of EIA for water management measures like water-quality objectives and waste discharge limits is legally possible, but not mandatory.

To make EIA mandatory for waste discharges, they might be added to the list of activities in Appendix I to the EIA-Convention. Or alternatively, the Water-Convention might indicate, that waste discharges into watercourses with likely significant impact on the environment should be treated like activities listed in Appendix I to the EIA-Convention.

⁵⁷ Schrage/Enderlein, p. 24

the argumentation would be the same as for the EIA use in the process of water-quality objectives

⁵⁹ Art. 2.5 of the EIA-Convention

Art. 9.2 (d) of the Water-Convention

C Comparison of procedures

I Public Participation

The open landscape, the water and the air, have come to be considered as the common property of all, and their rational management is not only in the interest of one single individual but in the interest of all. Therefore, states have increasingly begun to recognize that, in the law of environmental protection, the public ought to have the opportunity to participate in the administrative decision-making process. As a result, the view has emerged that when it is the public in whose interest environmental protection measures are taken, and when it is the public who are expected to accept and comply with those measures, the public should have the chance to develop and articulate its opinion, and to air it during the environmental decision-making process. ⁶¹

1 Forms of Public Participation

Actual regulations follow different approaches to guarantee public participation.

They might introduce the public's opinion into administrative procedures, such as licensing procedures and planning, rule-making or the perhaps most important administrative procedure the EIA.⁶²

Informing the public is the most important prerequisite for its participation in environmental decision-making. Information should reach citizens who are or may be affected by a proposed action of the administration and the information, furthermore should be given in time, and be comprehensive and comprehensible.⁶³

A third approach constitutes the hearing of the public, that is the right for the public to be heard and the right to raise objections. It is generally considered to be desirable that the public should be granted these rights in all those decision-making procedures in which mayor act or projects are to be considered which may seriously affect natural environment.⁶⁴

The two Conventions under discussion provide for public participation on different stages.

2 EIA-Convention

The EIA-Convention treats the public *participation* as an integral part of the whole EIA-procedure. That's why no separate article treating public participation can be found. The EIA-Convention defines *public* as one or more natural or legal persons. ⁶⁵ According to art. 2.2 the term includes the public of the party of origin as well as the one of the affected party.

Participation is not defined separately in the EIA-Convention. But arts. 3.8 and 4.2 precise the term. According to these articles public participation covers public information, and the possibility for the public to make comments or objections on the proposed activity.

The EIA-Convention dedicates four provisions to public participation: arts. 2.2, 2.6 containing the more general requirement and arts. 3.8, 4.2 fixing the place of public participation in the

⁶¹ Gündling, p. 131

⁶² Gündling, p. 136, 137

⁶³ Gündling, p. 137

⁶⁴ Gündling, p. 142

⁶⁵ Art. 1 (x) of the EIA-Convention

EIA-procedure.

Art. 2.2 simply states that parties shall establish EIA-procedures that permits public participation. Art. 2.6 supplements this general requirement with a requirement that reaches into the sovereignty of the concerned parties. According to this provision the party of origin shall provide an opportunity to the public in the areas likely to be affected to participate in relevant environmental impact assessment procedures regarding proposed activities and shall ensure that the opportunity provided to the public of the affected party is equivalent to that provided to the public of the party of origin.

In art. 3, that deals with the notification as first stage in the EIA-procedure, paragraph 8 commits concerned parties to ensure that the public of the affected party in the area likely to be affected be informed of, and be provided with possibilities for making comments or objections on, the proposed activity, and for the transmittal of these comments or objections to the competent authority of the party of origin. This provision clarifies the general requirement established in art. 2.2 and 2.6 and ensures that the opinion of the public living in the likely affected environment is taken into consideration in the decision-making process.

At the second stage of the EIA-process, the preparation of the environmental impact assessment documentation, public participation is integrated according to paragraph 2 of article 4. The concerned parties shall arrange for distribution of the documentation to the authorities and the public of the affected party in the areas likely to be affected and for the submission of comments to the competent authority of the party of origin.

Especially these two provisions reveal the importance that the EIA-Convention attributes to public participation. As for example art. 4. 2 names the public together with the competent authority the public is considered as important as the authority itself. Also, the way the EIA-Convention integrates the relevant provisions shows that public participation is meant to be an elementary part of the EIA-procedure.

Nevertheless parties might escape to the requirement to include the public in the decision making-process according to art. 2.8. This article gives parties the possibility to detain information if its publication is prejudicial to industrial and commercial secrecy or national security.

3 Water-Convention

In contrast to the EIA-Convention the Water-Convention treats the public in one single provision. Art. 16 calls for public *information*. In its paragraph 1 art. 16 enumerates the information that shall be available to the public in particular: water-quality objectives, permits issued and the conditions required to be met as well as results of water and effluent sampling carried out for the purposes of monitoring and assessment, as well as results of checking compliance with the water-quality objectives or the permit conditions.

Paragraph 2 stipulates that this information shall be available at all reasonable times for inspection free of charge, and shall provide members of the public with reasonable facilities for obtaining from the riparian parties, on payment of reasonable charges, copies of such information.

Thus, the Water-Convention omits the parties to ensure the appropriate information of the public and gives precise ideas what kind of information. In this way it guarantees that the public is able to judge environmental consequences likely to affect the watercourse.

But contrary to the EIA-Convention it does not go beyond the public *information*. It does not indicate in detail how the public can make use of the information, in which way it can take influence on the protection, control and reduction of transboundary impact. It is rather left to the parties to develop through bilateral or multilateral agreements or even on the national level possibilities for the public to take advantage of the information.

The Water-Convention does not give a definition of *public*. Therefore it remains unclear, whether *public* in the sense of the Water-Convention means corresponding to the EIA-Convention every natural or legal person. It is left to interpretation whether only the public of riparian parties is included or also the public of non-riparian-parties and of non-parties to the Convention.

An objective orientated interpretation might outline that the Water-Convention intents to fight transfrontier pollution. Polluting structures or activities in border areas may affect the public of one or more states. Under the premise that information should reach all individuals and groups who are or may be affected by an action, one would then conclude that in cases of transfrontier pollution public information should also cross national borders. *Public* in the sense of the Water-Convention then would include the public of non-riparian-parties and even non-parties, when it is or is likely to be affected.

In art. 8 the Water-Convention allows the parties to refer to national legal and applicable supranational regulations to protect information related to industrial and commercial secrecy, including intellectual property or national security in order to detain information from the public. Apart from intellectual property this provision corresponds to art. 2.8 of the EIA-Convention.

4 Relationship

As public participation constitutes an integral part of the EIA-Convention the relationship between the respective provisions of the two Conventions is described through art. 9.2 (j) of the Water-Convention that refers to other international regulations. Consequently the Water-Convention follows the same EIA-procedure as the EIA-Convention. Therefore the public has to be integrated correspondingly under the Water-Convention.

So, in a certain way the Conventions complement their provisions regarding the public. Whereas the Water-Convention ensures that the public is provided with the necessary information so that it is able to qualify consequences on the aquatic environment, the EIA-Convention equips the public with the possibility to really use this information and to influence the decision-making process during an EIA.

Concerning the definition of the public it seems appropriate to interpret the public under the Water-Convention in correspondence to the EIA-Convention, that is the broad understanding including the public of the affected party.

5 Recommendations

In the Water-Convention the term public might be further determined. This could be done with a provision similar to those in the EIA-Convention.

II Post-project analysis in EIA and water-related monitoring

Nowadays the need to continuously observe the environmental conditions and especially once an activity with likely impact on the environment has been enacted is clearly seen. Therefore the EIA-Convention as well as the Water-Convention contain provisions to regularly verify the change of the environmental conditions and to take care of the environmental consequences after a proposed activity has been realized. The EIA-Convention contains provisions calling for *post-project analysis* (art. 7 and Appendix V) whereas the Water-Convention requires water-related *monitoring* (arts. 4, 9.2 (b), 11).

1 Relationship between Post-Project Analysis and Monitoring in general

In order to show the relationship between these provisions of the two Conventions, it seems necessary to precise the content and the objectives of *post-project analysis* (hereinafter PPA) on

the one hand and of monitoring on the other hand.

PPA is defined as an environmental study undertaken during the implementation phase (prior to construction, during construction or operation and at the time of abandonment) of a given activity - after the decision to proceed has been made. ⁶⁶ Consequently, in its relationship to the EIA it can be understood as an integral part of the EIA-process on the stage of project implementation. PPAs might ocurr in different forms classified according to their use or to their type of study⁶⁷. The main objectives of PPAs may be the following: they shall ensure or facilitate the implementation of the activity in accordance with the terms imposed by the EIA process, they shall serve to learn from the particular activity being studied and they shall provide the necessary feedback in the project implementation phase both for proper and cost-effective management and for EIA-process development. From the legal point of view one objective of PPA might be to monitor compliance with the agreed conditions set out in construction permits and operating licences.

As the effectiveness of the PPA depends essentially on the comparison of the environmental conditions before and after implementation of the proposed activity the survey and collection of base-line data⁶⁸ is absolutely necessary.

Monitoring can be defined as an activity undertaken to provide specific information on the characteristics and functioning of environmental and social variables in space and time.⁶⁹ The main types of monitoring are Baseline Monitoring⁷⁰, Impact Monitoring⁷¹ and Compliance

⁶⁶ Doc. ECE/ENVWA/11p. 3

The PPA can be used to manage the environmental impacts of the activity (Project Management PPA) or to aid to learn the lessons to be learned from the activity so that future reviews of similar projects can benefit. In this way PPAs develop the process of the EIA (Process Development PPA). Furthermore there might ocurr types of PPA that deal with the scientific accuracy of impact predictions or the technical suitability of mitigation measures (Scientific and Technical PPA) or PPAs focusing the effectiveness of the EIA-process (Procedural and Administrative PPA); see Doc.ECE/ENVWA/11, pp. 7, 8

The purpose of baseline data is to provide a description of conditions before development; when this background data set is compared to the description derived from subsequent monitoring it can be used to detect change.

⁶⁹ Bisset, p. 2

Baseline Monitoring can be described as the measurement of relevant environmental variables during a representative period of pre-project conditions in order to obtain information on the natural variability and existing trends which characterize the selected components of the systems under consideration, see Bisset, p. 2

The aim of Impact Monitoring is to identify the impacts of human activities on the environment (its occurrence, its magnitude and its nature) and if it is attributable to the project. see Bisset, p. 11

Monitoring⁷².

From this follows its relationship to PPA. As Monitoring furnishes essential data, *inter alia* baseline data and data detecting changes in environmental conditions caused by the activity, it constitutes a means to undertake a PPA.

After this survey of the general relationship between PPA and Monitoring, the specific provisions in the two Conventions will be analysed and compared.

2 Post-project analysis in the EIA-process under the EIA- Convention

It is art. 7 completed by Appendix V that calls for PPA under the EIA-Convention. This provision does not define what PPA means in the sense of the Convention. It rather sets minimum standards for the PPA, including the surveillance of the activity and the determination of adverse transboundary impacts. The surveillance and determination are needed in order to achieve the objectives enumerated in Appendix V to the Convention, which are monitoring compliance with the conditions set out in the authorization or approval of the activity and the effectiveness of mitigation measures; the review of an impact for proper management and in order to cope with uncertainties; and the verification of past predictions in order to transfer experience to future activities of the same type.

According to this provision the PPA is optional as it is up to the parties to agree whether and to what extent a PPA shall be undertaken.

Art. 7.2 and 7.3 ensure that due account is taken to the outcome of the PPA. According to these paragraphs the parties have to inform eachother if a significant transboundary impact is likely to ocurr. Concerned parties then have to enter into consultations on necessary measures to reduce or eliminate the impact.

It might be interesting to look more closely to the importance that the EIA-Convention dedicates to PPA. First, it can be stated, that PPA is treated as an integral part of the entire EIA-procedure. This conclusion is supported by the fact, that the provision relating to PPA is placed among the provisions describing the EIA-procedure (art. 3 Notification, art. 4 Preparation of the EIA Documentation, art. 5 Consultation on the basis of the EIA Documentation, art. 6 Final decision and at the end art. 7 Post-project analysis). This integration into the EIA-procedure and the provisions⁷³ ensuring the due consideration of PPA results strengthen the opinion that PPA is considered to be essential for the EIA-Convention.

However, the optional character of PPA supports the opposite view. Furthermore in comparison with the procedure prior to implementation, the assessment process after the decision to proceed with the project is described very vague and therefore lacks several aspects considered to be important for the assessment procedure. For instance, corresponding provisions requiring public participation, committing parties to elaborate a PPA documentation including the no-action alternative, provisions that help settle the question of significance (corresponding to art. 3.7) or lists indicating activities that should be subject to a PPA cannot be found.

Therefore the regulation relating to PPA and especially the optional character of the PPA under the EIA-Convention may be considered as rather disappointing⁷⁴.

Compliance Monitoring is directed to ensuring that regulations are observed and that standards are met. see Bisset, p. 17

Art. 7.2 and 7.3 of the EIA-Convention

Pineschi, p.487

Another provision should be mentioned here. Appendix II giving the minimum content of the environmental impact assessment documentation requires under (c) a description of the environment likely to be significantly affected by the proposed activity and its alternatives. With this provision the EIA-Convention acknowledges the essential importance of base-line monitoring presented earlier.

3 Water-related monitoring and assessment under the Water- Convention

Apart from the very general requirement in art. 4, committing all parties to monitor the conditions of transboundary watercourses, arts. 9.2 (b) and 11 demand joint monitoring and assessment of the riparian parties.

Art. 11 determines the content of monitoring by setting up a minimum of aspects which have to be monitored under the Water-Convention.

Conditions of transboundary watercourses, including floods and ice drifts, as well as transboundary impact have to be subject to joint programmes for monitoring⁷⁵.

Common pollution parameters and pollutants whose discharges and concentration in transboundary waters shall be regularly monitored⁷⁶.

Furthermore paragraph 3 of art. 11 demands regular assessment of the conditions of transboundary waters and the effectiveness of measures taken.

In contrast to the EIA-Convention these requirements are mandatory. Art. 11.3 demands public information of the results of the assessments which is also contrary to the EIA-Convention.

4 Relationship between these provisions

As expounded above, monitoring and assessment of environmental conditions programmes are the essential bases for an effective PPA. The provisions in the Water-Convention give clear objectives of monitoring and assessment systems, which are to prove that changes in the conditions of transboundary waters caused by human activity do not lead to significant adverse effects on the environment. In this way they offer basic and additional information for PPAs required under the EIA-Convention.

A problem of coordination might arise from the fact, that PPA under the EIA-Convention is optional whereas the establishment of monitoring and assessment systems under the Water-Convention is mandatory. Concerned parties not willing to regularly monitor or assess the conditions of the water-course might refer to the EIA-Convention demanding an agreement between the parties and thus escape to the procedure mandatory under the Water-Convention. However, such an interpretation of the provisions cannot be in the sense of the two Conventions. Especially because the EIA-Convention was fully taken into consideration during the elaboration of the Water-Convention.

Three possible ways of interpretation might eliminate this apparent coordinative problem between the two Convention.

One might consider riparian parties for whom the establishment of monitoring and assessment systems is mandatory under the Water-Convention as *concerned parties* in the sense of the EIA-

Art. 11.1 of the Water-Convention

⁷⁶ Art. 11.2 of the Water-Convention

Convention. 77 As such riparian parties to a common watercourse agreed when adopting the Water-Convention to carry out PPAs to the extent of the provisions set forth in art. 11 of the Water-Convention. Thus, the establishment of monitoring and assessment programmes is mandatory according to the Water-Convention and according to the EIA-Convention because parties concluded an agreement.⁷⁸

The same conclusion would give an argumentation, which stresses that monitoring and assessment of the conditions of the watercourse is only one basic part of the whole PPAprocedure. Consequently parties would be obliged according to the Water-Convention to monitor and assess the conditions of the watercourse as a minimum standard, but are free to agree about further measures completing the optional PPA-procedure according to the EIA-Convention.

Finally, one might emphasize the sectorial character of the Water-Convention being a special legal instrument for transboundary watercourses. The EIA-Convention as an integrative Convention embraces various kinds of sectors and thus contains broader and more general regulations as to the extent and legal binding character of PPA. As the special legal instrument the Water-Convention then would have priority to the EIA-Convention. The result of such an interpretation would also be, that monitoring and assessment of the conditions of the watercourse is mandatory whereas every further reaching measure is up to the concerned parties.

According to Appendix II c the EIA-documentation has to include a description of the environmental likely to be significantly affected by the proposed activity and its alternative. Such a description needs base-line monitoring and therefore constitutes an additional link to the requirement of monitoring under art. 11 of the Water-Convention. But in contrast to art. 11 of the Water-Convention demanding monitoring and assessment of transboundary watercourses in regular intervals, thus also after the implementation of the project. Appendix II c referring to art. 4.1 of the EIA-Convention only requires base-line monitoring prior to realisation.

However, as both provisions are mandatory no problem of coordination between them arises.

5 Recommendations

As PPAs are supposed to be one of the most cost-effective tools for improving assessments of

According to art. 1 (iv) of the EIA-Convention concerned parties means the party of origin and the affected party of an environmental impact assessment pursuant to the EIA-Convention. Party of origin means the contracting party or parties to the EIA-Convention under whose jurisdiction a proposed activity is envisaged to take place (art. 1 (ii)). Affected party means the contracting party or parties to the EIA-Convention likely to be affected by the transboundary impact of a proposed activity (art. iii)). If an activity with a likely impact on transboundary watercourses is planned under the jurisdiction of one riparian party it might affect the environment of other riparian parties. Even when a riparian party is not party to the EIA-Convention art. 9.2 (j) declares the provisions of the EIA-Convention applicable. Accordingly riparian parties to the same transboundary watercourse are party of origin and affected party of an environmental impact assessment and therefore concerned parties in the sense of art. 1 iv of the EIA-Convention.

Art. 7.1 of the EIA-Convention

environmental impacts its importance should be reflected in the EIA-Convention. As an integral part of the EIA-procedure it should follow corresponding stages to the prior impact assessment. Such a correspondence may be established by adding more detailed provisions or by simply referring to provisions treating the prior assessment. The PPA might be mandatory. A list of major projects with potentially significant impacts requiring PPA may be added.

The relationship between the requirement of PPA under the EIA-Convention and requirement of monitoring under the Water-Convention should be clarified. One might add a paragraph to art. 11 of the Water-Convention, indicating the possibility to take additional measures to the mandatory monitoring in order to complete the posterior surveillance of the activity and its consequences on the watercourse.

Conclusion

The comparison of the two Conventions shows how closely they are interrelated. This linkage is expressively provided in art. 9.2 (j) of the Water-Convention, that declares the EIA-procedure of the EIA-Convention for completely applicable. In top of that several requirements of the two Conventions even complete eachother, as for instance monitoring under the Water and PPA under the EIA-Convention. Having this close interrelation in mind, parties to the both Conventions should further elaborate the mechanism to work together in carrying out the requirements of the Conventions.