ECONOMIC COMMISSION FOR EUROPE Geneva

Current Policies, Strategies and Aspects of Environmental Impact Assessment in a Transboundary Context



NOTE

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PREFACE

The Convention on Environmental Impact Assessment in a Transboundary Context, drawn up 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 countries (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) and the European Union. The Convention will enter into force 90 days after the date of deposit of the sixteenth instrument of ratification, acceptance, approval or accession. By the end of 1995, 11 countries (Albania, Austria, Bulgaria, Finland, Italy, Luxembourg, Netherlands, Norway, Republic of Moldova, Spain and Sweden) had deposited their relevant instrument with the Secretary-General of the United Nations.

Environmental impact assessment (EIA) has already shown its value for implementing and strengthening sustainable development, as it combines the precautionary principle with the principle of preventing environmental damage and also arranges for public participation. EIA has also become the major tool for an integrated approach to the protection of the environment since it requires a comprehensive assessment of the impacts of an activity on the environment, contrary to the traditional sectoral approach. Moreover, EIA requires the formulation of alternatives to the proposed activity and brings facts and information on environmental impacts to the attention of the decision makers and the public. EIA is already used as an effective instrument for improving the quality of the environment at the national level and it is understood that the EIA Convention will lead to environmentally sound and sustainable development by providing information on the interrelationship between economic activities and their environmental consequences in particular in a transboundary context. The Convention specifies the procedural rights and duties of Parties with regard to the transboundary impacts of proposed activities and provides procedures, in a transboundary context, for the consideration of environmental impacts in decision-making procedures. The Convention also obliges Parties to assess the environmental impacts at an early stage of planning and includes measures and procedures to prevent, control or reduce any significant adverse effect on the environment, particularly any transboundary effect, which is likely to be caused by a proposed activity or any major change to an existing activity. Appendix I to the Convention covers 17 groups of activities to which the Convention applies. The Convention includes a preamble, 20 articles and seven appendices. The preamble sets out the underlying principles of the Convention such as the interrelationship between economic activities and their environmental consequences, the need to ensure environmentally sound and sustainable development, the need to give explicit consideration to environmental factors at an early stage in the decision-making process and to use EIA as a necessary tool to improve the quality of the information presented to decision makers. The preamble also stresses the need and importance of developing anticipatory policies and of preventing, mitigating and monitoring significant adverse transboundary impact.

The drawing-up and signing of the Convention on Environmental Impact Assessment in a Transboundary Context has influenced and will continue to influence other international instruments such as conventions and ministerial declarations. Article 4, paragraph 4, of the ECE Convention on the Transboundary Effects of Industrial Accidents (Helsinki, 1992) indicates that when a hazardous activity is subject to an environmental impact assessment in accordance with the EIA Convention 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 the Industrial Accidents Convention, the final decision taken for the purposes of the EIA Convention shall fulfil the relevant requirements of the Industrial Accidents Convention, and includes procedures compatible with those set out in the EIA Convention. The ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 1992) also makes reference to EIA in a transboundary context, as do provisions in other conventions such as Article 7 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki, 1992). The EIA Convention is also recognized in, for example, the Final Declaration of the Ministerial Meeting of the Oslo and Paris Commissions (September 1992), the Ministerial Declaration on Cooperation in the Barents Euro-Arctic Region (January 1993) and the Nuuk Declaration on Environment and Development in the Arctic (September 1993).

In their Resolution on Environmental Impact Assessment in a Transboundary Context (ECE/ENVWA/19), the Signatories to the Convention decided to strive for its entry into force as soon as possible and to seek to implement it to the maximum extent possible pending its entry into force. So far four meetings of the Signatories to the Convention, open to all ECE member countries, have been held, in 1991, 1992, 1994 and 1995. These meetings reviewed the actions taken by Signatories to implement the Convention pending its entry into force. The EIA Convention is understood to be an innovative international legal instrument for achieving sustainable development and for preventing, reducing and controlling

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transboundary environmental impacts. The importance of this legal instrument as an efficient tool to promote active, direct and action-oriented international cooperation at the regional level is growing in view of the increasing membership of ECE. The EIA Convention will halt the growing potential for transboundary environmental problems, resulting from the creation of new national frontiers, if it is rapidly and efficiently implemented and complied with by as many member countries as possible, in particular by the countries in transition. Consequently, it will help to eliminate the former dividing line between east and west and to integrate countries with economies in transition into a pan-European legal and economic space.

This publication describes current practice with respect to EIA implementation, in particular in a transboundary context, and further completes information in-

cluded in other publications in the ECE Environmental Series related to EIA, such as No. 4, Policies and Systems of Environmental Impact Assessment and No. 5, Application of Environmental Impact Assessment Principles to Policies, Plans and Programmes. As new regulations are introduced or existing regulations modified at the national level in order to arrange for the EIA process, in particular in a transboundary context, earlier practice is reviewed; the current publication therefore represents the state of knowledge and experience up to mid-1995. This sixth volume in the ECE Environmental Series contains four documents on policies, strategies and aspects of EIA, in particular in a transboundary context, which were finalized and recommended for publication by the Meeting of the Signatories to the EIA Convention. In accordance with established practice, the sole responsibility for this publication rests with the secretariat of the United Nations Economic Commission for Europe.

Part One

POLICIES AND STRATEGIES PROMOTING ENVIRONMENTAL IMPACT ASSESSMENT

INTRODUCTION

According to the Resolution on Environmental Impact Assessment in a Transboundary Context (ECE/EN-VWA/19), the Signatories to the Convention on Environmental Impact Assessment in a Transboundary Context decided, *inter alia*, to continue to cooperate in bringing closer together their policies and strategies in relation to environmental impact assessment (EIA). To promote this cooperation and examine ways and means to further harmonize these policies and strategies, it was decided to analyse relevant information prepared by delegations.

Accordingly, this part of the publication examines current practice and is based on information transmitted by the delegations of Albania, Armenia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Hungary, Lithuania, Malta, Netherlands, Norway, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom.

I. LEGAL AND ADMINISTRATIVE MEASURES FOR THE APPLICATION OF EIA

A. Current legislation on EIA

In the ECE region, EIA is being increasingly used as an instrument promoting an integrated approach to environmental protection and management, as it requires a comprehensive assessment of the impacts of a proposed activity and its alternatives on the environment, and brings facts and information on impacts to the attention of the decision makers and the public. It thereby opens the way to preventive measures and promotes the achievement of sustainable development. New regulations have been introduced or existing regulations modified at the national level in order to arrange for the EIA process.

In Albania, the Environmental Protection Law was approved in January 1993. The second chapter of this law provides for an EIA procedure but its articles are general, since this law was conceived as a basic law and does not include detailed information. The provisions related to EIA were further elaborated in a specific regula-

tion on "The protection of special areas from the pollution caused by solid wastes, harmful substances and hydrocarbons". A draft law on EIA has also been prepared. It will be transmitted to interested institutions for comment. A list of the activities that require an EIA has been drawn up. It is commonly held that the draft law on EIA should be tested in a few pilot projects, so that on the basis of the experience gained with these projects, the necessary improvements can be made before the Parliament approves the law.

In Armenia, EIA is considered of great importance, particularly in a transboundary context. Therefore, the Ministry of Environment Protection is drawing up a draft law on EIA of economic activities which will be submitted to the Armenian Parliament. The Ministry has already made the necessary arrangements to accede to the Convention.

In Austria, the Act on Environmental Impact Assessment and Public Participation was approved by Parliament on 24 September 1993, as published in the Federal Law Gazette No. 697/1993, and entered into force on 1 July 1994. The EIA procedure will be part of a comprehensive licensing procedure dealing with all required licences together.

In Belarus, a number of acts have been prepared which will make it mandatory for proponents of economic activities to undertake an EIA at an early stage of planning. One of the first is the 1992 Law on the Protection of the Environment adopted by the Supreme Soviet of the Republic of Belarus, which provides that project proposals of economic activities must contain EIA documentation (Article 29). In addition, the Law on State Environmental Review was adopted in June 1993. Its Article 6 provides that a proponent must submit environmental documentation describing the extent of risk to the environment posed by the proposed activity, the mitigation measures as well as the EIA documentation. To further implement these acts, a national procedure for EIA is being prepared which would also be in conformity with the provisions of the Convention.

In *Belgium*, the successive constitutional reforms implemented by the laws of the institutional reform of 1980, 1989 and 1993 and the revised Constitution of 17 February 1994, have transferred almost all competence regarding environmental matters to the three regions: Flanders, Brussels and Wallonia. This means that each region has promulgated its own EIA regula-

tions in order to comply with the provisions of EEC Directive 85/337.

In the Walloon region, EIA was introduced by the Decree on the Organisation of the Evaluation of Environmental Effects of 11 September 1985. This legislation has been completed and fully implemented by: the Administrative Order of 31 October 1991; the Guidance Letter Number 66 of 12 February 1992 of the Environmental Administration; the Administrative Orders of 19 March 1993 and 22 July 1993; and the Ministerial Circular of 30 November 1994.

In Flanders, EIA became operational on 23 March 1989 through six administrative orders issued by the Regional Government of Flanders. The legal basis for the EIA orders relating to industrial installations is the Environmental Licence Decree of 28 June 1985. This Decree integrates EIA within the licensing procedures for industrial installations. In order to implement it, two administrative orders (Vlarem I and Vlarem II) became effective on 1 September 1991 and 1 January 1993, respectively. These orders have been modified several times. A substantive revision of Vlarem I and a new Vlarem II have already been approved by the Regional Government and will become effective in 1995. For nonindustrial developments, the applicable EIA orders supplement the basic Town and Country Planning Act of 1962. It is expected that this Act will be replaced by a new decree shortly. Some minor aspects of the Flemish EIA regulations have been modified by the administrative orders of 27 April 1994 and 25 January 1995.

The Inter-University Commission for the Revision of Environmental Law has prepared a draft proposal for more comprehensive EIA legislation, which is contained in the Commission's proposals for new environmental framework legislation. Until now few of these proposals have been adopted by means of separate decrees. At the end of 1994, a draft EIA decree, including EIA for certain plans and programmes, was finished.

In Brussels, the legal basis for EIA is provided by the Ordinance of 30 July 1992 on the Prior Assessment of the Environmental Effects of Certain Projects. This Ordinance is linked to both the Ordinance on Urban Land Uses of 29 August 1991 (modified on 30 July 1992), and the Ordinance of 30 July 1992 on the Environmental Permit (to operate industrial installations). The EIA Ordinance became operational on 1 December 1993 through the Ordinance of 23 November 1993. This Ordinance, as well as the administrative orders of 3 June 1993 and 17 June 1993, modified and complemented the Ordinance of 30 July 1992.

Each of the three regional EIA regulations contain lists of activities requiring an EIA. In Flanders there are two lists: one for industrial installations and another for non-industrial developments (infrastructure), including land-use plans. The Walloon regulations not only contain a list of projects for which an EIA is mandatory, but also stipulate that the authorities may require an EIA even if the proposed activity is not on the list. The Brussels regulations have two lists for which a different EIA procedure and content of the environmental impact statement (EIS) is required.

The Walloon and Brussels regulations are more detailed regarding the time-frames for the various phases of the EIA process. While the Walloon and Brussels regulations incorporate public participation, the Flemish EIA procedure does not. None of the regional regulations require post-project analysis.

In Bulgaria, EIA provisions are one of the major issues covered by the Environmental Protection Act, which was adopted in 1991. The stipulations of the Act are further elaborated and the procedures defined by Regulation No. 1/28.12.92 on EIA. These legal documents reflect the experience of other countries with environmental legislation and the EIA requirements of international organizations. With these regulations, the necessary conditions for undertaking preventive measures through the EIA procedures have been created. The proponents of activities are required to undertake an EIA in the initial stages of planning. The state of the environment, the degree of the risk resulting from the planned activity, the possible alternatives, and measures for reducing the adverse impact on human health and the environment, are to be described in the EIA documentation.

Bulgaria has adopted the approach of listing the activities for which EIA is mandatory. They are listed in Annexes I and II to the Environmental Protection Act and in Annex I to the Regulation. The Act provides that on a decision of the competent authorities or on the basis of proposals of concerned persons addressed to the competent authorities, other projects and facilities may also be assessed. The EIA procedure begins when the proponent of an activity presents a preliminary report to the competent authority. This report is evaluated by experts from the Ministry of the Environment or the Regional Environmental Inspectorates. It is subsequently submitted to the Supreme Environmental Board within the Ministry or to the Environmental Boards within the Regional Inspectorates. The project alternatives are presented at this stage of the EIA report preparation and the most environmentally friendly variant is determined, which is further developed at the next stage of research and planning. The additional questions and requirements which must be taken into account in the final EIA report are also determined. No deadline is fixed for the preparation of the final report.

Within a period of one month the competent authority makes a decision on the preparation of a final report on EIA. When a final EIA report is not deemed necessary, the competent authority makes the final decision on EIA. A final report on EIA is mandatory for the projects, facilities and activities listed in Annex I to the Act and Annex IA to the Regulation. After the submission of the final EIA report, the competent authority fixes a date for the public discussion of its results. The results of the public discussion are to be reflected in the final report, which is submitted to the Supreme Environmental Board or the Environmental Boards, for a final decision.

The Bulgarian law provides an opportunity for all interested State or public organizations, environmental groups and citizens to become familiar with the EIA documentation, which is made accessible to the public during one month. The public discussion is organized by the competent authority in cooperation with the legal

administration and the proponent of the activity. The competent authority informs the interested persons and the public in writing and through the media about the public discussion. The announcement specifies the terms of public access to the documentation, the procedure for submitting views in writing and fixes the time and the venue of the discussion. In the course of the discussion everybody is given the opportunity to ask questions, make comments and raise objections. In the case of disputes, the competent authority decides on the need for a follow-up discussion, which is preceded by expert consultations and recommendations.

In the case of complex technical discussions, a non-technical summary is enclosed in the documentation. In accordance with Regulation No. 1, the proponent of the activity presents his own monitoring plan, explaining the means for surveillance and control of the harmful substance emissions from the site, for organizing, if necessary, the monitoring of environmental parameters to control and prevent the adverse impact on human health and the environment. Environmental audits of the operation of existing facilities are carried out periodically in order to check the precision of the EIA and the observance of the requirements set forth in the permit. The audit is carried out on a decision by the competent authority at least once every five years.

In Canada, the Canadian Environment Assessment Act came into force in January 1995 and is the statutory basis by which the Government of Canada assesses the environmental effects of projects requiring federal action or decisions. The Act applies when a federal authority proposes a project, grants money or provides another form of financial assistance to a project, grants an interest in land to enable a project to be carried out or exercises a regulatory duty in relation to a project, such as issuing a permit or licence. It also applies to selected physical activities specified in regulations. The Act ensures that the potential environmental effects of projects are considered as early as possible in a project's planning stages. Under the Act, there are four types of environmental assessments: screening, comprehensive study, mediation and panel review. The federal department or agency with the decision-making power for the project is responsible for conducting the EIA. The screening addresses the environmental effects of a proposed project and determines the need to mitigate negative effects, modify the project plan or recommend further assessment through mediation or panel review. Large-scale projects usually undergo a more intensive assessment called a comprehensive study. Mediation is a voluntary process in which an impartial mediator appointed by the Minister of the Environment helps interested parties resolve issues surrounding a project. Following a screening or comprehensive study, if it is determined that a project requires further evaluation, the project may be referred for review by an independent public review panel. The Canadian Environmental Assessment Agency (CEAA) administers the federal environmental assessment process. It is an independent agency and reports directly to the Minister of the Environment.

In Croatia, the Ministry of Civil Engineering and Environmental Protection has the obligation to implement the EIA procedure included in the 1980 Law on Physical

Planning and Spatial Arrangement and the regulations defining this procedure in detail enacted through the 1984 Regulations on Environmental Impact Study. The EIA procedure entails the collection of information on the project and the proposed site, the elaboration of the EIA documentation, the evaluation of this documentation by experts, the collection of comments by the public, and the final decision including conditions related to environmental protection which must be implemented when the project is realized.

In the Czech Republic, several acts have been drafted to establish the EIA process for proposed activities, such as the 1992 Act on the Environment, the 1992 Act on Environmental Impact Assessment and the 1992 Decree of the Ministry of the Environment on certificates of professional competence for EIA and on the procedure for the public discussion of the assessment. According to the EIA Act, the competent authorities, i.e. the bodies of State Administration that are competent in the EIA process and organize the EIA procedure following the EIA Act, are the Ministry of the Environment (level I—assesses projects listed in Appendix 1 to the EIA Act), and district offices (level II—assess projects in Appendix 2 to the EIA Act).

In Denmark, EIA procedures are carried out under a variety of legal instruments, such as the 1988 Executive Order concerning the Environmental Assessment of Major Projects of Coastal Waters, the 1989 Amendment of the Environmental Protection Act, the 1989 Executive Order on the Assessment of the Impact of Major Projects on the Environment, the 1991 Executive Order on environmental approval of activities covered by EIA in the National and Regional Planning Act, and the 1992 Planning Act.

In Estonia, the acts that establish the EIA process for projects are (i) the Order of the Estonian Government No. 314 of 13 November 1992 on Environmental Impact Assessment and (ii) the Order of the Ministry of the Environment No. 8 of 14 March 1994 on the Methodological Guidelines for Implementing Environmental Impact Assessment Acts related to air and water protection also contain provisions on EIA. Local environmental protection departments undertake EIAs related to proposed activities when the likely impacts are within the administrative jurisdiction of these authorities. When the impact is expected to cross this jurisdiction, the Ministry for the Environment is responsible for undertaking the EIA. The lists of proposed activities subject to either a local EIA or a national EIA are included in annex I below. The main criteria for determining the significance of effects are the scope of the impacts and the size of the planned activity. According to these criteria all the projects which are considered to be subject to EIA are divided into two levels of importance: State and regional level. EIA should be carried out within one month, starting from the submission of the application and all requested information and documents. This time-limit can be extended at the request of an expert and there is no timelimit for this extension. Time-frames for the separate phases of the EIA process are not established. EIA is financed by the proponent. If there are no Estonian experts with experience in the relevant area, foreign experts have to be found. EIA is undertaken in relation to deci-

sions on (i) the site of a project; (ii) the application for a permit concerning the use of natural resources; (iii) a pollution permit; and (iv) the approval of the initial task and technical requirements to design projects. It is also performed before the project documentation is approved and before a construction permit is issued. The items considered in the EIA include indirect environmental consequences, risk analysis, solutions concerning the prevention of accidents and the minimization of damage. The analysis of measures planned for environmental protection and waste management is essential. A new law on EIA is being finalized and will be based, inter alia, on the provisions of the EIA Convention. Aspects concerning environmental auditing and quality control will be included in the law. The new law's procedure for carrying out EIA will oblige the proponent to submit the EIA documentation and will thus give the competent authority more possibilities to concentrate on quality control and supervision.

In Finland, the Act on Environmental Impact Assessment Procedure came into force on 1 September 1994. Its aim is to further the assessment of environmental impacts and their consistent consideration in planning and decision-making, and at the same time to increase the information to the public and their opportunities to participate. The EIA procedure is integrated into the existing planning and permit procedures. In the EIA procedure, the proponent will prepare an assessment report presenting information about the project and its various alternatives, together with a comprehensive evaluation of their environmental impacts. The report will be appended to the other material related to the decision-making. The authorities are not allowed to make any decision on a permit or a plan until the assessment procedure has been concluded. The assessment of the environmental impacts is the responsibility of the proponent. Coordination of the assessment procedure and related duties rests with the regional environmental authority. The citizens and authorities in the affected area can take part in the procedure and express their comments first on the impacts which are to be studied (the scoping phase) and later on the assessment report itself. The Act also includes provisions on assessing the environmental impacts of projects whose effects extend into the territory of another country.

The EIA Decree contains a detailed list of 18 different project types which require EIA. The list is based on the lists in the EIA Directive (85/337/EEC) of the European Community and in the Convention on Environmental Impact Assessment in a Transboundary Context (see annex I below). The EIA procedure can also be applied to an individual project not included in the list or to a change of a completed project that is likely to have a significant adverse environmental impact. The decision to apply the assessment procedure in these cases is made by the Ministry of the Environment.

According to the Act the following criteria should be used when considering whether the EIA procedure should be applied to a project which is not included in the list:

(a) The likely impacts should be comparable to the impacts of the listed projects; and

(b) Special attention should be paid to the nature, scope and location of the project as well as to the combined effects of the project and other projects.

At the moment work is being carried out in order to determine these criteria in more detail.

According to the Act, the Ministry of the Environment has one month's time, starting from the date on which it has obtained sufficient information about the project, to decide whether the EIA procedure is to be applied to an activity not listed in the EIA Decree. The plan for the preparation of the EIA report (the assessment schedule) has to be publicly available during a period of at least two weeks. The time-frame for the comments of the public in the affected area and the relevant authorities is 30 to 60 days. The time period shall begin on the date of publication of the plan's announcement. The coordinating authority in the EIA procedure shall give its statement on the plan within one month after the expiry of the time for the comments. There is no timeframe for preparing the EIA documentation. The EIA documentation will usually be available together with the application for a licence, so the time-frame for that varies depending on the licence regulations. The Act specifies that the minimum period for making the announcement available is 14 days, and for the comments from the public and the authorities, 30 to 60 days. The time period shall begin on the date of publication of the announcement. The coordinating authority shall give its statement on the EIA documentation within two months after the expiry of the time for the comments.

The Act contains requirements for public participation in two phases: in the scoping phase and later when the EIA documentation has been prepared. The Act includes minimum requirements concerning the obligation to announce and arrange for the possibility to comment in writing, but public meetings or oral commenting are also possible. It is considered important that the coordinating authority should have all the comments before it makes its own statement. The Act sets out stipulations on the content of the EIA documentation. The documentation shall include a proposal for a monitoring programme.

In France, the obligation to apply EIA is laid down in article 2 of the Law on the Protection of Nature (10 July 1976) as well as in relevant decrees of 1977 and 1993. The Law is intended to help the public or private proponent to implement environmentally sound activities/projects; to help the competent authority to take into account the relevant information in the final decision; to inform the public on activities which are likely to affect their surrounding environment and to facilitate their participation in the decision-making process. The EIA is carried out under the responsibility of the proponent. In particular, the choice of the issues which require analysis as well as the methodology for their study are the sole responsibility of the proponent on the basis of the structure of the EIA, as defined by decree. The provisions do not include the obligation to involve the public or the authorities in the scoping phase when it is decided which issues will be analysed in an EIA for a particular project.

The technical authorities responsible for the investigation of a project, prior to its authorization, have the main responsibility for checking the accuracy of the EIA documentation. This results from the fact that French legislation has made EIA compulsory and defined the terms for publicizing it. Several authorities, and in particular the environmental authorities, check the quality of the documentation within the framework of existing administrative procedures.

In Georgia, EIA, in particular in a transboundary context, is a high priority for the Ministry for Environmental Protection. In this respect, new legislation will be submitted to the Council of Ministers for approval.

In *Hungary*, EIA provisions are included in the 1992 Governmental Decree on electricity and thermal energy generating installations with significant impact on the environment, and are expected to be included also in new physical planning regulations. General EIA provisions are included in the Governmental Decree for the provisional regulation on the assessment of environmental impacts of certain activities (4 June 1993). The draft act on the protection of the environment comprises separate chapters addressing the content and procedural aspects of EIA. The Bill passed Parliament in May 1995 and will enter into force at the end of 1995.

In Lithuania, the new law on EIA is under preparation. This new law and other relative regulations will define the procedures for public participation in the EIA process, the list of proposed activities requiring EIA, time-frames for various stages of EIA, etc. The existing EIA procedure in Lithuania is closely related to land-use planning and the permitting process. The description of the EIA procedure is scattered in various normative acts. The requirement for EIA is described in the Law on Environmental Protection. Article 15 of this Law points out that legal and natural persons applying for a permit to engage in economic activities shall, at their own expense, prepare and submit to the Environmental Protection Department (EPD) documentation about the possible impact of such activities on the environment. The EPD decision is a prerequisite for a State institution to issue a permit for an economic activity. In the meantime, the main document regulating the EIA procedure is the Governmental Order prepared by EPD on the Site Selection for the Construction of Objects, Approval or the Environmental Impact Expertise of the Projects Documentation in the EPD System. Two stages of EIA are specified in this Order. In the first stage EIA is carried out for the site selection. The proponent is obliged to present the initial material (characterizing the object to be constructed and the natural conditions of the location) for the assessment of the site to the regional Environmental Protection Agency. The positive conclusions of this assessment, together with the conclusions of specialists from other fields, are a basis for the issuing of a permit. EIA is also carried out in the second stage. The project documentation prepared by the proponent must cover the assessment of the effects of the proposed activity on air, soil, water, fauna and flora. The project documentation is presented to the regional environmental protection agency for evaluation. For some objects, project documentation shall be presented to the EPD central office (major industrial projects with a significant impact on the environment, mineral resource exploitation projects, constructions planned in protected areas, plans for nationally significant cities and others). The EPD conclusion on the EIA is final. There is no appeal against its decision. At present, the EIA process does not foresee formal procedures for public participation. It is not specified how information on EIA is to be made available. However, the Law on Environmental Protection presents the possibility to demand information on and the EIA of a proposed activity.

In Malta, in accordance with the relevant provisions of the 1991 Environment Protection Act, any organ of the Government shall inform the Minister for the Environment before granting a permit for the execution of a project which is likely to have an impact on the environment, because of its nature, scale, locality, etc. The application for a permit has to include all the details required for an assessment. No government project which will substantially change the environment shall be executed before being submitted to the Minister for an assessment of its environmental impact, and before such an assessment has been prepared, However, the Minister has the duty to see that such an assessment is made in the shortest possible time and not later than three months from the date of submission of the project. The EIA shall identify, describe and assess, in every case, the direct and indirect effects on the environment and on human beings, fauna and flora; soil, water, air, climate and landscape; on the economy and the historical heritage; and on the social environment. Projects may be exempted from the assessment when the environmental impact would be minimal. The information to be submitted to the Minister should include a description of the project, its dimensions, design and proposed site; an explanation of the steps taken or about to be taken to diminish harmful effects; scientific data which serve as basis for the project; and a brief explanation of the project describing its aim.

In the Netherlands, the EIA procedure has been laid down in the following regulations: the Environmental Protection Act (1993, amended in April 1994), which replaces the 1988 Environmental Protection (General Provisions) Act; the Environmental Impact Assessment Decree (May 1987, amended in 1992 and 1994), which lists the activities and decisions relating to the activities subject to EIA; and the Notification of Intent (Environmental Impact Assessment) Decree (1987, amended in 1993). The amendments were prepared mainly to comply fully with the EC Directive on EIA. The main new element is the introduction of a screening procedure for a new group of activities. In this screening procedure the competent authority has to decide on a case-by-case basis whether an EIA is necessary. This screening applies only for a new group of activities (mainly activities listed in Annex II to the EC Directive on EIA). Another new element is the new section dealing with activities with potential transboundary environmental effects. A specific feature of the Netherlands legislation is the role of the EIA Commission, which consists of independent experts. It provides advice on the project and specific guidelines for the content of the environmental impact statement (EIS) and reviews the EIS.

In Norway, the 1990 regulations relating to EIA, which are integrated into the Planning and Building Act (1985), contain provisions relating to, inter alia, projects requiring notification, the content of notifications and the content of EIA documentation. The Planning and Building Act describes the tasks to be performed by the Ministry of Environment related to EIA. Provisions on EIA are also contained in the 1981 Pollution Control Act and some other acts such as the 1976 Petroleum Act, which has EIA requirements for the opening of new offshore areas to oil and gas exploration and for the development of petroleum fields.

In *Poland*, the legal provisions which form the basis for EIA have changed. On January 1995 the new Act on Land-Use Planning and the Construction Act came into force. Based on an authorization given by the new Act on Land-Use Planning, the Minister of Environmental Protection, Natural Resources and Forestry promulgated an executive order in March 1995 determining, *inter alia*, the project types which are extremely harmful to the environment and to human health and the project types which may have an impact on the environment. The new Act provides for a procedure aimed at determining the conditions for decisions on land-use planning and construction. These decisions will be taken at the local level.

The local authorities are expected to coordinate this decision-making procedure, including EIA, with the Ministry as well as with the relevant inspectors. The new executive order includes lists of projects which are subject to EIA. The new Act includes an obligation for the proponent to attach to his application, information on water demand, waste treatment or disposal and, in specific cases, on ways and means of neutralizing waste, and information on the impact on the environment or, if there is no obligation to undertake EIA, the use of the environment. The legislation determines criteria for defining a development as "exceptionally harmful to the environment and human health", subject to EIA, and specifies the requirements that the EIA documentation is to meet. It also determines a category of developments which "may worsen the state of the environment". The competent provincial authority may include a project in this category and bind the proponent to prepare EIA documentation. The preparation of EIA documentation is linked to the requirements of the siting procedure, but is ordered and supervised by the environmental authority. In 1990 an EIA Commission was established as a consultative organ to the Minister of Environmental Protection, Natural Resources and Forestry. It consists of 75 independent experts: academics, professionals and NGO members, who are appointed for a period of four years. The task of the Commission is to review and give its opinion on EIA documentation, to publish information materials on EIA procedures and practices, and to initiate EIA training. Work is proceeding on new legislation which will change and simplify the siting procedure and the EIA system. The changes will harmonize Poland's EIA provisions with the Convention.

In the Republic of Moldova, provisions related to the mandatory EIA procedure have been included in two bills, namely the Act on Environmental Protection (adopted in June 1993) and the draft act on the State environmental review.

In the Russian Federation, environmental impact assessment activities are carried out as part of the State's ecological expertise. The concept of environmental impact assessment in a transboundary context is reflected in a number of legislative acts and departmental documents relating to State ecological expertise. The concept of State ecological expertise is enshrined in the Environmental Protection Act adopted in 1992 and Decision No. 942 of the Council of Ministers of the Government of the Russian Federation dated 22 September 1993 entitled "Confirmation of Decision on State ecological expertise". These instruments set forth the types of documentation subject to State ecological expertise and the essential provisions governing the State ecological expertise procedure. Expanding upon the above-mentioned normative and legal acts, the Ministry of Protection of the Environment and National Resources of the Russian Federation prepared a number of internal documents on matters pertaining to environmental impact assessment and State ecological expertise such as:

- (a) In December 1993 the Central Directorate for State Ecological Expertise of the Russian Ministry of Protection of the Environment and Natural Resources prepared a set of "Guidelines on ecological expertise of pre-project and project documentation" to replace the "Temporary instructions on ecological justificatory documents for economic and other activities in pre-project and project materials" of 1992. These Guidelines include a precise list of ecologically hazardous installations and types of economic activity (see annex I below) based on the Convention on Environmental Impact Assessment in a Transboundary Context;
- (b) An Order of the Ministry of Protection of the Environment and Natural Resources of the Russian Federation dated 18 July 1994 confirmed the "Decision on environmental impact assessment in the Russian Federation", which was then registered at the Ministry of Justice of the Russian Federation on 22 September 1995 under No. 695 and obtained the status of a legal document, the implementation of which is binding upon all legal persons in the Russian Federation. This document defines the individual elements of the environmental impact assessment procedure and contains a list of types of economic activity and installations for which the justificatory documentation must include an environmental impact assessment;
- (c) In July 1994, the Central Directorate of State Ecological Expertise of the Russian Ministry of Protection of the Environment drew up and adopted an "Instruction on the ecological justification of economic and other activities in pre-investment and project documentation", setting out in detail the requirements as to the essential principles of ecological justification of activities in terms of environmental impact assessment;
- (d) At present, the Russian Ministry of Protection of the Environment and Natural Resources has prepared:
 - (i) an Instruction on the procedure for conducting State ecological expertise setting out the requirements as regards the nature and contents of materials to be submitted for State ecological expertise by the proponent of the project and calling, inter alia, for the inclusion in the set of materials submitted for expertise of information

on the results of public discussions concerning the planned activities;

(ii) State Ecological Expertise Bill, which has been given a first reading by the State Duma. The Bill sets out the basic principles underlying the policies and strategy of the Russian Federation in the area of State ecological expertise and, inter alia, defines the environmental impact assessment requirements. In practical terms, the Ministry of Protection of the Environment and Natural Resources of the Russian Federation requires that an environmental impact assessment should be carried out in respect of all projects included in the Register of Ecologically Hazardous Installations and Types of Economic Activity, including installations having a transboundary impact. Preproject and project material that is not accompanied by environmental impact assessment documentation is not accepted for State ecological expertise.

In *Slovakia*, relevant provisions are implemented through the EIA Act, which entered into force in 1994 and includes the procedures and provisions of the Convention.

In *Stovenia*, the legal basis for EIA is included in the 1993 Environmental Protection Act, which requires EIA to be applied to specific types of activities as defined by the Government.

In Spain, EIA is established through national legislation, such as the 1986 Royal Decree, the 1988 Act relating to highways, and the 1989 Act on the conservation of natural areas and wildlife, and through regional legislation.

In Sweden, the legislative provisions on EIA are laid down in chapter 5 of the Act on the Management of Natural Resources (NRA) and the Government Ordinance on EIA. These regulations came into force on 1 July 1991. Several acts are subordinated to the rules of the NRA. There are no criteria for determining the significance of the effects of activities specifically relevant to the Convention. Work is under way to develop criteria concerning the effects of activities in general. In that work criteria such as environmental targets, threshold levels and critical loads, assessment criteria and criteria for determining areas of special environmental importance are being developed.

There are no specific rules on times-frames for various phases of the EIA process according to the Convention. The time-frames are those included in each specific act or in general rules. When the EIA requirements were introduced, the legislator chose not to develop a special procedure, but to use the existing licence procedures in the laws connected with NRA. The procedural changes introduced in these acts relate in particular to the announcement of EIA and the designation of a special "case-holder" where the public may read the EIA. There is also a possibility for the public to express an opinion before the decision is made.

In an environmental code which is being drafted, further steps are to be suggested to introduce a general

requirement for participation and comments by the public and the authorities concerned before the legal procedure is initiated. When an activity is given permission, a monitoring programme may be connected to the permission. The monitoring programme regulates the follow-up and the post-project analysis of the activity. There is no automatic follow-up or post-project analysis of the EIA.

In Switzerland, the legal basis for EIA is Article 9 of the 1983 Law on the protection of the environment, which indicates that before taking a decision on the planning, construction or modification of installations which could have a significant impact on the environment, the authority shall assess their compatibility with the requirements of the protection of the environment. This article has been further defined by the Ordinance of 19 October 1988 on EIA, which contains general provisions on the EIA procedure, defines the role of authorities and the proponent and includes the list of activities which require an EIA. The Ordinance does not create new procedures; EIA is implemented within a given decision-making procedure which is specific for any given type of activity.

In *Turkey*, relevant provisions are included in the Environmental Impact Assessment Regulation which was adopted by Governmental Decree on 7 February 1993, as stipulated in Article 10 of the Law on Environment No. 2872, which is currently under revision.

In Ukraine, the requirement to assess the impact of planned economic or other activities on the natural environment is established by law. In 1991 the Verkhouna Rada of Ukraine passed the Environmental Protection Act. Article 51 of this Act requires project documentation to include an environmental impact assessment. At present the preparation of EIA information for inclusion in project documentation is governed by temporary instructions entitled "Environmental impact assessment procedure to be followed in preparing feasibility studies (calculations) and blueprints for the construction of national economic installations and facilities" and by the "Regulation concerning the form and content of information for assessing the impact of projected economic activities on the state of the environment and natural resources at various stages of the construction of new and the expansion, reconstruction or re-equipment of existing industrial and other installations".

In 1991, following Ukraine's independence, work began on the preparation of Ukraine's own basic environmental protection legislation. In particular, work has been in progress since 1993 on the draft State building standards entitled "Form and content of environmental impact assessment information in connection with the design and construction of enterprises, buildings and installations. Main planning regulations", which are to be approved and brought into operation. A draft ecological appraisal act has been prepared, several provisions of which will also govern the preparation of EIA information to be included in project documentation and the establishment of the procedure for evaluating such information during the ecological appraisal.

Since the procedure followed in Ukraine requires the EIA information to be an integral part of the project documentation, the time-frame for its preparation is governed by the same regulatory instruments as the project itself. The temporary instructions referred to above provide that, before submitting the documentation for State ecological appraisal, the proponent of the project and his project designer must organize and hold a preliminary examination and discussion of the EIA findings with any member of the public whose interests will be affected by the implementation of the project. The time-frames for the ecological appraisal of EIA information are governed by the "Instructions on State ecological appraisal" and must not exceed 90 calendar days.

There are many different forms of public participation in the discussion of planned activities—through the mass media and the organs of local government and by means of public ecological appraisals. The legislation of Ukraine and the existing technical regulations do not provide for post-project analysis. However, compliance with confirmed planning decisions during construction is generally monitored both by the project designers—by means of authorial supervision—and by State monitoring bodies (including environmental protection bodies).

In the *United Kingdom*, there are a number of regulations, including new and amending statutory instruments requiring an EIA for certain project categories, such as the 1988 Town and Country Planning (Assessment of Environmental Effects) Regulations.

B. Lists of proposed activities requiring EIA

In a number of ECE member countries, national legislation establishes lists of activities to which EIA is to be applied. Such lists offer a user-friendly system which is understood by all concerned. The practical experience with such lists shows that they have to be strict, although flexibility is needed to adapt them to changing circumstances. Therefore, lists are often supported by provisions which allow for the application of EIA to proposed activities not included in these lists. The current situation is as follows:

In Austria, the legislation on EIA contains two lists of projects (see annex I below). For the projects on the first list a complete EIA will have to be performed. For projects on the second list only a public participation procedure will have to be performed, including information on the project, submission of comments and the holding of a public hearing. For major changes to existing activities an EIA is required in certain circumstances, e.g. where a certain percentage of the threshold level or capacity of the plant will be exceeded.

In Bulgaria, the approach of listing the activities for which EIA is mandatory has been adopted. They are listed in annexes I and II to the Environmental Protection Act and in annex I to the Regulation. The Act provides that by decision of the competent authorities or on the basis of proposals of concerned persons addressed to the competent authorities, other projects and facilities may also be assessed.

In Canada, there are four regulations that help define which projects or physical activities require an EIA or the type of EIA that must be conducted:

- (a) The Comprehensive Study List Regulation describes those types of projects that must be assessed through a detailed study. These projects have the potential of causing significant environmental effects and generate considerable public concern;
- (b) The Law List Regulation sets out the licences, permits or other regulatory authorizations for a project which require the project to undergo an environmental assessment;
- (c) The Exclusion List Regulation describes projects which do not require an environmental assessment. Such projects are routine and small-scale and would not be expected to result in significant environmental effects;
- (d) The Inclusion List Regulation describes activities that must undergo an environmental assessment where the activity does not relate to a physical work or undertaking.

In *Croatia*, the EIA legislation includes a list of proposed activities which require an EIA.

In the Czech Republic, the 1992 Act on Environmental Impact Assessment includes two lists of proposed activities which are subject to EIA: those within the competence of the Ministry of Environment and those within the competence of local authorities (see annex I below).

In *Finland*, EIA legislation includes a list of projects which are subject to EIA (see annex I below).

In France, the activities concerned are listed by law and decree and are essentially related to planned activities at the project level and land development, either private or public, likely to have an impact on the environment. For private projects, only those which need an authorization or approval may be subject to an EIA. The field of application is determined in the following way:

- —Certain categories of activities are subject to EIA because of their nature, whatever the size or cost of the project, or because they are below certain technical thresholds:
- —Certain other categories of activities are subject to EIA because of their nature, whatever the size or cost of the project, or because they are above certain technical thresholds:
- Finally, the categories of activities and developments which are not explicitly included in the annexes to the decree are exempted when they are under a financial threshold of 12 million French francs. This financial threshold is therefore the ultimate criteria for decision-taking when relevant technical criteria are missing;
- —Moreover, the decree has created a simplified procedure, the impact-notification (notice of impact), which substitutes for the full EIA procedure in some particular exempted cases.

The total number of environmental impact studies undertaken every year is important. Since the entry into

force of the above-mentioned regulations on 1 January 1978, about 5,000 to 6,000 studies have been undertaken every year.

In *Hungary*, the 1993 EIA Decree includes two lists of activities and facilities which may cause significant impacts on the environment. In both cases there is a general requirement to prepare a preliminary EIS and to take a decision case by case on whether or not a full EIA should be required. The first list is a general one; the second list contains activities which are submitted to EIA if they are to be located in nature conservation areas. The modification of activities that are listed is also subject to EIA if it meets criteria defined in the decree.

In the Netherlands, the 1987 EIA Decree includes a list of proposed activities which require EIA. This Decree is currently being amended to make it comply with the relevant EC directive.

In Norway, the 1990 regulations establish a detailed list of projects which may have significant impacts on the environment requiring notification and, where relevant, the preparation of EIA documentation. This list is contained in annex I below. In addition to the projects listed, there is a general clause in the 1990 regulations which enables the Ministry of Environment to decide that the EIA provisions may also apply to proposed activities which are not listed when the nature, extent and impact of the specific activity is expected to be particularly significant or uncertain, or if there is disagreement on the likely environmental and social impacts of the activity.

In *Poland*, EIAs are prepared for projects "exceptionally harmful to the environment and human health" and for projects which "may worsen the state of the environment".

In the Republic of Moldova, for large and complex projects that are likely to have a significant impact on the environment, EIA must be carried out at the feasibility study stage. The findings of the EIA are to be set out in a separate section of the feasibility study report, the so-called statement of environmental impacts.

In the Russian Federation, a list of proposed activities (see annex I below) that call for the undertaking of special investigations, additional research and development work including EIA has been established.

In Slovakia, the Act of 1994 contains two lists of proposed activities: for proposed activities in the first list the EIA procedure is mandatory, the second list contains activities subject to EIA depending on the decision by a competent authority, taking into account the characteristics of the proposed activity, the proposed site and the significance of the likely impacts. The Act also contains a provision to apply EIA on a case-by-case basis depending on a decision by a competent authority also to proposed activities not included in the two lists, for example for activities planned in a protected or already heavily polluted area.

In Slovenia, the Environmental Protection Act includes a provision which allows the Government to issue a regulation prescribing categories of activities for which

EIA is mandatory, other categories of activities, conditions and criteria subject to EIA and categories of activities requiring an analysis of particular impacts. Moreover, the Ministry of the Environment and Physical Planning may decide on a case-by-case basis that a particular activity is subject to EIA.

In *Turkey*, the list of activities subject to EIA is included in the EIA Regulation (see annex I below) and has been drawn up in conformity with the Convention; certain additions have been made to reflect the national conditions.

In *Ukraine*, this question is being dealt with in two ways. The regulations in force at present provide a so-called negative list of projects which do not require EIA. In the State building standards which are in preparation it is proposed to include a so-called positive list of projects which do require EIA. The comparison of experience in the use of these two regulatory lists (see annex I below) will indicate which approach is preferable.

In the *United Kingdom*, certain projects are listed which are subject to an EIA (see annex I below). Certain other projects must also be subject to an EIA when they are likely to have significant impacts on the environment. Most of these two groups of activities require planning permission under the Town and Country Planning Act, but some are subject to other forms of development consent.

C. Criteria for determining the significance of impact

Criteria for determining the significance of environmental impacts have been developed in some ECE countries.

In Canada, the Canadian Environmental Assessment Agency has developed guidelines to assist in determining the significance of environmental impacts. The guidelines set out the following factors that should be taken into account in deciding whether the environmental impacts are significant: magnitude; geographic extent; duration and frequency; degree of reversibility of the impact; and ecological context.

In *Croatia*, the criteria for determining the significance of impacts have been determined taking into account threshold levels for impacts such as water pollution, noise and radiation.

In *Finland*, the criteria for determining a possible significant adverse impact are being prepared. The proposed legislation includes the following text:

In considering the probable significance of environmental impact, the following must be taken into account:

- (a) The site and probable effects of the projects on important natural and cultural assets, on objects susceptible to damage and on human health, living conditions and amenities;
 - (b) The extent of the area affected by the project; and
- (c) Any combined effects of the project and other projects and operations.

In *Hungary*, during the selection of activities subject to EIA criteria such as the size of the site and impact

area, the number of environmental receptors to be affected, the intensity, magnitude and duration of impact, the risk inherent in the activity, coverage by other environmental legislation were taken into consideration. The list of activities which require EIA contains such criteria as capacity size, extent and nature conservation status of the location, use of natural resources or hazardous materials, complexity of technology. The criteria to be used by environmental authorities during the environmental licensing procedure to determine the significance of an impact are specified in relevant environmental regulations and EIA guidelines. The authorities consider only those criteria that are related to the particular features of the proposed activity.

In *Poland*, the criteria for determining the significance of impacts of projects that are "exceptionally harmful to the environment and human health" have been determined *inter alia* by threshold levels for emissions of pollutants (air, water, noise, radiation) related to an area's environmental sensitivity. The use of these criteria is supplemented by a short list of activities requiring EIA. The competent provincial authority decides whether a project falls in the category of developments which "may worsen the state of the environment".

In Turkey, the term significant impact is described in Article 4 of the EIA Regulation as the possible adverse impact of a proposed activity on the environment which is beyond acceptable limits as determined according to the relevant legislation and/or scientific principles, due to the features of this activity as sensitivity of the local environment to such impacts. The Regulation has developed criteria or thresholds for determining the significance of the effects of activities; these are included in its annexes.

In the *United Kingdom*, government circulars give general guidance, through indicative thresholds and criteria, to assist in determining whether projects which require planning permission are likely to have a significant environmental impact and therefore require an EIA.

D. Time-frames for various phases of the EIA process

In some countries, national legislation establishes time-frames for the different phases of the EIA process in order to provide clarity in advance and to avoid delays in the decision-making procedure.

In Austria, according to the EIA legislation, the proponent will, in the scoping phase, have to inform the authority in charge of the EIA procedure of the main elements of the proposed activity and will have to present a draft for the EIS six months before the envisaged application. Within four weeks the public will have the possibility to submit comments on this information to the authority in charge. After the application is made, the EIS will be submitted to the Ombudsman for the Environment, the local communities concerned and the Minister for the Environment, Youth and Family for comment within four weeks. The competent authority will have to work out a time schedule for the various phases in the course of the EIA procedure and take the

final decision on the project at the latest 18 months after the application. This time-limit is extended if a draft of an EIS is not submitted in the scoping phase. The application, the EIS, the scoping document for the environmental impact expertise (EIE) and other relevant information will be available to the public for at least six weeks. Within this period, everybody will have the right to submit written comments. After the EIE is completed, it will be available to the public for at least four weeks. A public hearing will have to be held within six weeks after the completion of the EIE and the public will have to be informed of the time and place of the hearing three weeks in advance. The minutes of the public hearing will be available to the public for four weeks. Until the announcement of the hearing, the proponent will have the possibility to change his application following the outcome of the EIA without repeating the already completed phases of the EIA. The transmittal of various information between the proponent and the competent authority and the other involved authorities will have to take place without undue delay.

In *Belgium*, the institutional reforms have reserved the competence for certain environmental matters for the national Government; this has consequences for EIA too. In addition to the specification of standards for products and the transit of waste products, the national Government remains competent for the protection against ionizing radiation including radioactive waste.

The basic legislation regarding the protection against ionizing radiation is the Act of 29 March 1958 on the Protection of the Population against Dangers from Ionizing Radiation and the Royal Decree of 28 February 1963, which introduced detailed regulations. The 1958 Act should be replaced by the—already published—Act of 15 April 1994 on the Protection of the Population and the Environment against Dangers from Ionizing Radiation and on the Federal Agency for Nuclear Control. This Act has not yet come into force however.

The Royal Decree of 1963 has been modified by the Royal Decree of 23 December 1993 in order to comply with the EEC Directive 85/337, as the various licensing procedures for the different categories of installations in the original royal decree did not provide for EIA. The major modifications are:

- —The list of installations is made consistent with the requirements of EEC Directive 85/337;
- —The introduction of an obligatory EIS for installations included in category I of the EEC Directive (article 6, paragraphs 2, 11). The EIS needs to contain the information required by article 37 of the EURATOM Treaty as specified by the recommendations of 7 December 1990 of the Commission of the European Communities;
- —The public is given more time to inspect the application, and the Permanent Council of the provincial government has more time to express its opinion;
- The Special Commission, the most important advisory organ, is broadened to include scientists specialized in ecological and environmental matters;
- The decision contains the opinion of the Special Commission;

—The decision is made public by bill posting in the municipality.

The licensing procedure for installations in category I of the EEC Directive is described below (procedures for the other categories are drawn up in the same way; for installations in category II an EIS may be required). This category includes nuclear power stations and reactors and installations for the collection, treatment, packaging, permanent storage and final disposal of radioactive waste. The developer has to submit an application to the Governor of the province where the installation is planned. This application needs to contain an EIS. A copy of the application is sent to the authorities of the municipality where the project is planned, so that they can organize the public inquiry and express their opinion. The Permanent Council of the provincial government gives its opinion too. The application, the opinions and the comments received from the public are sent to the Special Commission. This Commission is composed of civil servants and scientists and occasionally representatives from the regional governments. The Commission can gather the opinion of national, international or foreign institutions and specialists. In the cases provided for by article 37 of the EURATOM Treaty, the Special Commission seeks the advice of EURATOM. The Special Commission sends its preliminary opinion to the applicant. The applicant has thirty days to react; this period can be prolonged by the Commission on request. Afterwards the Special Commission formulates its motivated, final opinion. If this opinion is positive it may contain specific exploitation conditions to reduce the effects on the environment. The decision is issued by royal decree. If the opinion of the Special Commission is negative the licence is refused, and even if it is positive the licence may not be granted. The decision always contains the opinion of the Special Commission, including its opinion regarding the EIS. The decision is notified to the Special Commission and the Governor of the province, who sends a copy to each municipality involved, where the Mayor makes the decision public by bill posting.

An evaluation of this EIA procedure cannot be given, as it has not been applied yet. However, it is clear that the public can comment only after the EIS has been finished and is part of the application. The introduction of EIA for this kind of project is nevertheless a positive development, especially if one considers that previously most licences for nuclear power stations were issued after the completion of the installations, as was pointed out in the accompanying report on the Royal Decree of 1993.

In Bulgaria, the EIA procedure begins when the initiator of the activity (private or State) presents the preliminary report to the competent authority. The report is evaluated by experts from the Ministry of Environment or the regional environmental inspectorates. It is then submitted to the Supreme Environmental Board of the Ministry of Environment or to the environmental boards of the regional environmental inspectorates. The project implementation alternatives are presented at this stage of the EIA report preparation and the most environmentally friendly variant is determined, which is further developed at the next stage. The additional questions and requirements which must be taken into account in the final

EIA report are also determined. No deadline is fixed for the preparation of the final report. Within one month the competent authority makes a decision on the preparation of a final report on EIA. When a final EIA report is not deemed necessary, the competent authority makes the final decision on EIA. A final report on EIA is mandatory for the projects, facilities and activities listed in annex I to the Act, respectively Annex IA to the Regulation. After submission of the final EIA report, the competent authority fixes a date for the public discussion of the results of EIA. The results of the public discussion are reflected in the final report which is submitted to the Supreme Environmental Board, or the environmental boards respectively, for final decision.

In the Czech Republic, the EIA process begins by the notification of an activity to the relevant authority. The EIA documentation is promptly forwarded to the communities concerned and to the State authorities in question, with the request for their opinion. The community concerned allows the public to consult the documentation during a period of 30 days and afterwards, within 14 days, communicates its opinion and the opinion of the public to the relevant authority. The authorities concerned have to transmit their opinions within 50 days. The expert opinion on the EIA documentation will then be arranged for within 60 to 210 days. After the receipt of the expert opinion, the relevant authority convenes a public hearing within one month. The next step is the formulation of a protocol of the public hearing and promulgation of the standpoint on the EIA, which is the conclusion of the EIA process.

In Finland, according to the EIA law, the Ministry of the Environment has one month's time from the date on which it has obtained sufficient data on the project, to decide whether an activity not listed in the EIA decree will be subject to the EIA procedure or not. The plan for the preparation of the EIA report has to be publicly announced at least during a period of two weeks. The timeframe for the comments of the public in the affected area and the relevant authorities is from 30 to 60 days. The time period shall begin on the date of publication of the announcement. The regional environmental authority, the liaison authority in the EIA procedure, shall give its statement on the plan within one month after the time for comments has expired. There is no time-frame for evaluating the impacts and preparing the EIA documentation. It is up to the proponent. The EIA documentation will usually be announced together with the application for a licence, so the time-frame for that varies depending on the licence regulations. In the EIA law the minimum period for the announcement is 14 days, and for the comments from the public and the authorities from 30 to 60 days. The time period shall begin on the date of publication of the announcement. The liaison authority shall give its statement on the EIA documentation within two months after expiry of the time for the comments.

In *Hungary*, there is no specific timing for decisionmaking on activities that are subject to EIA. Competent authorities apply the same time-frame as in other licensing procedures. In Hungary's two-phase EIA process, this allows 30 days for the review of the preliminary EIS and scoping by the authorities concerned, 30 days for the review of the detailed EIS, 15 days for the public review of the detailed EIS, 30 days for the final decision. If any amendment or supplement is required from the proponent it allows an additional 30 days for reconsideration. There is no time-limit for the preparation of EIS.

In the Netherlands, the EIA procedure starts when a proponent (private sector or government agency) decides to undertake an activity included in the list of projects to be submitted to EIA (EIA Decree). It then informs the competent authority of its intention to proceed by providing a notification of intent. Once this notification has been published the scoping process begins. The scoping process (three months) brings together the proponent, the competent authority, the EIA Commission, other advisers and the public. The scoping results in the formulation of project-specific guidelines to be issued by the competent authority. The proponent is responsible for preparing the EIS based on these guidelines. There are no timeframes for the preparation of the EIS. Once prepared, the EIS is to be submitted to the competent authority. Within six weeks of receiving the EIS, the competent authority may return it to the proponent for correction or amendment should it not be in conformity with the guidelines. If it is accepted, the EIS is sent to the EIA Commission and other advisers, who have two months to review it. It is also made available to the public who, as a rule, have one month to comment. A public hearing takes place. The record of the hearing is sent to the EIA Commission, other advisers and the proponent and is made available to the public. The EIA Commission's review of the EIS continues until one month after the end of the public review period. When the competent authority has received the EIA Commission's review and the results of the public inquiry it makes a decision. In the decision the competent authority states the grounds for its decision in so far as it is affected by the content of the EIS. Furthermore, the competent authority is legally obliged to monitor the project. The competent authority has to submit an evaluation report to the EIA Commission, the advisers and the public. The competent authority is required to take the necessary action when the environmental impacts exceed those predicted in the EIS.

In Norway, according to the legal provisions, the competent ministry which is administratively responsible for the project may, when the notification has been submitted, set a reasonable time for comments to the notification. This should normally not be shorter than six weeks. On the basis of the notification and the comments received, the competent ministry shall decide whether or not to require an EIS. This decision shall be taken in consultation with the Ministry of Environment, which in practice will need two to four weeks to arrive at its recommendations, depending on the complexity of the project. The competent ministry should, according to the regulations, arrive at its conclusions within a reasonable time, normally not exceeding four months. There is no limit concerning the time the proponent may use to prepare an EIS. In practice, it will take about six months.

In *Poland*, although no specific time-frame for the various phases of the EIA process exists, some time requirements are based on the siting procedure, within which EIA is prepared, and on administrative proceedings. The EIA Commission has three months to review,

give an opinion on the EIA documentation or return it for completion and correction.

In Switzerland, the Ordinance on EIA does arrange for time-frames for the various phases of the EIA process; however certain time-frames are given in the specific decision-making procedures. Taking into account the experience acquired during the first five years of the implementation of the Ordinance, a revision is being prepared which aims to simplify and speed up procedures. Within this context the introduction of time-frames for certain parts of the EIA procedure is foreseen.

In Turkey, the institutions, agencies and persons planning to carry out activities subject to EIA have to submit a petition to the Provincial Organization of the Ministry to request the review of their initial environmental assessment check-list and evaluation matrix. These documents are then reviewed and evaluated by the Provincial Organization of the Ministry. This Organization prepares a report about the environmental impacts of the activity within a maximum of three weeks. If deemed necessary, the Provincial Organization of the Ministry can establish a "special commission" including the representatives of the Provincial Organizations of other related ministries, local agencies, experts or legal entities, universities, research institutions and Professional Chambers, to this end. The Provincial Organization has to submit the report, containing justifications, prepared as a result of the review and evaluation, to the Local Environmental Committee. This Committee, after examining the report, decides that the impacts of the activity are either "significant" or "insignificant" in its first meeting. For the activities having "insignificant" environmental impacts, this decision is posted on a board for a week. Any objections raised during this period are reviewed by the Office of the Governor. If necessary, the Governorship can refer the objections to the Local Environmental Committee within one week to make a decision about the matter in its first meeting. When the decision remains the same, it is transmitted to the owner of the activity, to the Ministry and related agencies and institutions in writing. The owner of the activity is not obliged to draw up an EIS. For the activities which are decided as having significant environmental impacts, the need to prepare an EIS is served with a written notice to the owner of the activity, to the Ministry and related agencies within one week from the date of the decision of the Provincial Organization.

In *Ukraine*, the procedure requires that EIA information should be an integral part of the project documentation. The time-frame for its preparation is governed by the same regulatory instruments as the construction project itself. In other words, the time-limits for the preparation of a given project constitute, at the same time, the corresponding time-limits for the preparation of the EIA. The time-limits for the ecological appraisal of EIA materials are governed by the "Instructions on State ecological appraisal" and should not, as a rule, exceed 90 calendar days.

In the *United Kingdom*, the time-limits for completion of the EIA process vary in the different regulations involved. The majority of cases subject to EIA require planning permission and therefore the 1988 Town and

Country Planning (Assessment of Environmental Effects) Regulations, or the Scottish or Northern Ireland equivalents, apply. Under these regulations, where an application for planning permission is subject to EIA, the usual period for determination by the local planning authority is extended from 8 to 16 weeks to allow the environmental information to be fully taken into account. There are no formal scoping requirements in any of the regulations, but guidance to proponents recommends informal scoping including consultation with the planning authority, environmental bodies and the public. There is also a legal requirement for authorities with relevant information in their possession to make this available to a developer for the purposes of preparing an environmental statement. Within the overall period allowed for determining a planning application requiring EIA, three weeks must be allowed for public participation and a period of two weeks for consultation with the statutory consultees. No decision can be taken before the public participation and the consultation are completed. However, the periods for consultation vary depending on the regulations, e.g. the 1989 Planning (Assessment of Environmental Effects) Regulations (Northern Ireland) require four weeks for consultation with statutory consultees. If the local planning authority fails to issue a decision on an application within the stipulated time, the proponent has the right to appeal to the Secretary of State against non-determination. If a public local inquiry is held as part of an application procedure, the period taken to determine the application will be extended beyond the 16-week period.

E. Public participation procedures

Arrangements detailing public participation in the EIA process vary between countries. Opportunities are often given to the public to submit written comments; much less frequently there are provisions ensuring the organization of public meetings or hearings at which comments can be made orally and at which those preparing the EIA documentation may be questioned. In some countries, the definition of the members of the public who have the opportunity to express their opinions is limited to those within a certain distance of the proposed activity or to certain organizations with consultative status.

In Austria, the legislation on EIA contains a number of provisions for public participation at different stages of the EIA procedure. Beginning with the scoping phase and continuing during the EIA procedure, the public will have the opportunity to get relevant information and to submit comments on the different documents such as the EIS or the Environmental Impact Expertise. At the public hearing everybody will have the opportunity to ask questions, to express opinions or to raise objections. The proponent, the concerned authorities, and the owners of the affected and the neighbouring properties have to appear as well as experts. The Act also provides for citizens' initiatives. If such an initiative gets at least 200 signatures from persons of the affected or neighbouring communities, they will have the opportunity to participate in the EIA procedure as a party and have the right to remedies. The legislation also contains provisions on

how to handle public participation in cases of proposed activities in other countries which are likely to have an adverse impact on the environment in Austria. These provisions are similar to the provisions for national EIA.

In Bulgaria, the law provides for the opportunity of all interested State or public organizations, environmental movements and citizens to become familiar with the EIA documentation, which is made accessible to the public during one month. The public discussion is organized by the competent authority in cooperation with the legal administration and the proponent of the activity. The competent authority informs the interested persons and the public in writing and through the media about the public discussion. The announcement specifies the terms of public access to the documentation, the procedure for submitting written views and fixes the time and the venue for the discussion. In the course of the discussion everybody is given the opportunity to ask questions, make comments and raise objections. If there is a dispute, the competent authority decides on the need for a follow-up discussion, which is preceded by expert consultations and recommendations. For the discussion of complex technical solutions a non-technical summary is enclosed in the documentation.

In Canada, the Canadian Environmental Assessment Act provides for public input for most types of EIAs of projects. During a screening, public participation is left to the discretion of the authority responsible for the project's EIA. The public may be invited to examine and comment on the screening report before a final decision is made on the project. During a comprehensive study, because of the likelihood of considerable public interest and concern, a responsible authority may implement a public involvement programme. Whenever the Minister of the Environment receives a comprehensive study report, a notice is published to that effect and the public is provided with an opportunity to comment on the report before a decision is taken. The Minister takes public comments into account in determining whether further review of the project is needed. In mediation, public groups that have a direct interest in, or are directly affected by, a proposed project are provided with an opportunity to work with an independent mediator to reach a consensus with the proponent on the likely environmental effects and mitigation measures. During a panel review, members of the public may participate in meetings to identify issues to be addressed and appear before the panel in public hearings to present their concerns and recommendations. Funding is available for concerned citizens and organizations to help them participate in mediation and panel reviews through the Participant Funding Program. To facilitate public participation, information on environmental assessments is made available to the public through the public registry system.

In *Croatia*, existing regulations include provisions which allow the public to provide comments for a period of at least 30 days. The public is informed about the proposed activity through the mass media and has the opportunity to ask questions, to provide comments and to read the relevant documentation. The appropriate authority has the obligation to respond to these questions and comments.

In the Czech Republic, in accordance with the 1992 Act on Environmental Impact Assessment, the public is given the opportunity to examine the relevant documentation for a period of 30 days. Within this period a written opinion on the documentation may be submitted. In order to support public opinion, groups may be established to take part in the procedure. Within one month after receiving the expert opinion, the competent authority (either the Ministry of the Environment or a regional authority, depending on the nature of the proposed activity) will have to organize a public hearing. The proponent takes part in the public hearing.

In Estonia, detailed methodological guidelines have been developed and entered into force in a 1994 Regulation of the Minister of the Environment. According to this regulation, the public becomes involved at three different stages of EIA. It is the responsibility of the competent authority to make available to the public (through the media and regional channels of information delivery) information regarding the initiation of the EIA process, the proposed location and general technical characteristics of the project, also enclosing the name and address of the contact person to whom the mail with opinions and proposals can be forwarded. The competent authority ensures access of the public to the EIA documentation and possibilities for making comments. The decision makers inform the public of their decision and justifications for allowing the activity, paying special attention to the comments made by the public. This could be done, for instance, through a press conference. The proponent is obliged to ensure the operation of environmental monitoring and auditing systems at his own expense if the competent authority so decides.

In Finland, in the proposed EIA legislation there are provisions for public participation in two phases: in the scoping phase and later when the EIA documentation is prepared. The rules set as a minimum the obligation to announce and arrange the possibility to comment in writing, but meetings of any kind or oral comments are not excluded. It is considered important that the liaison authority has all the comments given, before making its own statement.

In France, it is compulsory to make the EIA available to the public. One objective of the legislation is that EIA is used to inform the public on activities which might have an effect on their environment. In general, certain activities which require EIA are also subject to a public inquiry in accordance with the relevant rules such as: nuclear power plants, classified facility, mining activities, regrouping of land, zones of concerted physical planning, etc. In those cases the EIA is brought to the attention of the public within the context of the public inquiry and forms an essential part of the assessment documentation. The public is thus informed before a decision is taken. The law of 12 July 1983 relative to the democratization of the public inquiry and the protection of the environment, the details of which were enacted through a decree of 23 April 1985, has improved the effectiveness of public inquiries.

In *Hungary*, it is possible to inform and involve the public at any stage of the licensing procedure when the competent authority considers it necessary. The govern-

mental decree on EIA is more stringent and contains provisions for the obligatory involvement of the public. It requires a public hearing after the competent authorities have reviewed the detailed EIS. The detailed EIS is open to public review for at least 15 days. A public hearing is organized by the competent regional environmental authority and the local authorities concerned. The authorities and parties concerned are always invited to participate in the public hearing. The parties concerned are the proponent, the population and the local government of potentially affected settlement(s).

In the Netherlands, the EIA process provides for public participation in two stages. First, before the environmental impact statement is prepared, in the scoping phase, the public is given the opportunity to make suggestions for the project-specific guidelines for the content of the environmental impact statement. Second, once the environmental impact statement has been prepared there is the opportunity for the public to comment both in writing and orally at a public hearing.

In Norway, the public has an opportunity to participate in the EIA process when the notification is submitted to the competent ministry for comment. At the EIS stage, there is, in addition, a legal requirement to convene a public meeting, which will be organized by the competent ministry, with the proponent and others present.

In *Poland*, the existing legislation enables the involvement of the public and NGOs in the EIA process. The public may participate in the administrative proceeding or administrative trial preceding the issuance of a project-siting decision. A comprehensive EIA is one of the documents considered within the administrative proceeding.

In the Republic of Moldova, the EIA provisions require public participation at the initial planning stage of the proposed activity. The proponent is required to make all the necessary arrangements for public participation. Basic information on the proposed activity, its likely environmental impacts and mitigation measures is announced through the mass media. Public participation also includes meetings with representatives of the local population of the areas likely to be affected.

In the Russian Federation, the proponent should discuss the results of the EIA with the public in the area likely to be affected. The proponent is responsible for organizing public hearings and meetings, although public participation is coordinated by a competent authority. The public and local pressure groups are represented on the review boards when environmental reviews are carried out.

In Switzerland, the Ordinance on EIA does not arrange for public participation through a public inquiry. Public participation is implemented in the following two ways:

The EIA documentation is accessible to the public; the text of the final decision on the implementation of the activity (as far as it is based on the conclusions of the EIA) can also be consulted by the public;

During the period when the activity is submitted to the public inquiry the persons who consider being affected can oppose the project; national organizations related to the protection of the environment also have the right to appeal (if an appeal is admitted) against the decisions taken by the authorities relative to the authorization of the activities which require EIA.

In Turkey, a meeting is held to inform the public about the proposed activity and to obtain their opinions and recommendations, after presentation of the EIS to the Ministry. A notice defining the type and location of the activity and, according to an agreement with the Ministry, the venue and time of the meeting are published in a local newspaper or in one of the five biggest national newspapers at least twice within a week by the owner of the activity. Additionally, the notice of the meeting is put up on a board for at least one week at places chosen by the highest local authority. The views of the public present at the meeting, which is organized under the highest local authority or its appointed authority, is included in an official report to the Ministry by the Provincial Organization. Those who want to review the EIS may do so at the Ministry or Provincial Organization during the review and evaluation period and express their opinions about the contents of EIS to the Ministry. Such opinions are taken into consideration by the Review-Evaluation Commission. Applications which are made after the period are not processed.

In *Ukraine*, the provisional instructions on the EIA procedure in force at present provide that, before the documentation is submitted for State ecological appraisal, the person commissioning the project and his project designer are bound to organize and hold a preliminary examination and discussion of the results of the EIA with representatives of the public whose interests are affected by the project. There are various ways of drawing the public into such a discussion: through the mass media, through the organs of local governments, by conducting a public ecological appraisal, etc.

In the United Kingdom, where a planning application is to be decided by a local planning authority, the application and the EIS must be advertised and made available to the public. This provides the interested parties with the opportunity to draw to the attention of the authority matters which they feel should be taken into account in reaching a decision. Planning authorities are required to determine each planning application on its merits, taking account of all material considerations, including comments made. The reports and recommendations of the professional advisers of the authorities are publicly available, so anyone can satisfy himself that applications have been fairly considered and his points taken into account. Certain applications are called in for determination by the Secretary of State, for example, if issues of more than local importance are concerned. An inquiry is normally held in such cases. Public local inquiries may also be held related to appeals by the proponent against the refusal of a local planning authority to grant planning permission for development or against the imposition of conditions when granting planning permission, or against the authority's failure to process a planning application within the stipulated period. The rules for these inquiries are designed to make the process

as efficient as possible, while not impairing the fairness and impartiality of the proceedings or the ability of the interested public to make their views known. The local planning authority, the proponent and others are entitled to appear and give evidence at the inquiry. Inspectors also have discretion to permit anybody else to appear, and in practice are likely to hear anyone who wishes to speak, provided their evidence is relevant and not repetitious. Anyone who is unable to attend the inquiry in person may supply a written statement of his or her views. Affected countries wishing to make comments on the EIA to the competent authority would be able to do so at the public inquiry, which enables all interested parties, including the proponent and affected countries, to cross-examine all the evidence submitted.

F. Post-project analysis

Although post-project analysis (PPA) is not always part of the EIA procedure, a number of ECE countries have legal provisions that may attach conditions to the final decision on a proposed activity, including PPA or monitoring conditions.

In Austria, according to the Act on EIA and Public Participation, PPA will have to be performed within three to five years after the implementation of the activity. The competent authority will have to examine whether the conditions included in the licence are met and whether the actual impacts correspond to the predicted impacts of the EIA. The operator of the plant will have to provide all the necessary information and documents in this respect. The competent authorities have to take appropriate action to reduce or mitigate impacts if the conditions in the licence are not met.

In Bulgaria, the proponent of the activity has to present his own monitoring plan, explaining the means for surveillance and control of the harmful substance emissions from the site, for monitoring, if necessary, environmental parameters to prevent adverse impact on human health and the environment. Operating facilities will be audited periodically to check the accuracy of the EIA and the observance of the requirements set forth in the permit. The audit is carried out upon prescription of the competent authority at least once every five years.

In Canada, under the Canadian Environmental Assessment Act, responsible authorities must address the need for a follow-up programme to verify the accuracy of the environmental assessment and/or to determine the effectiveness of mitigation measures.

In *Croatia*, PPA is not required under present legislation but the inspecting governmental authority may demand project revision when monitoring is undertaken and reveals that the conditions as set out in the authorization of the activity are not complied with.

In the Czech Republic, in accordance with the 1992 Act on Environmental Impact Assessment, the EIA documentation must contain an outline for a PPA or monitoring programme. The terms and conditions of the PPA will have to be included in the final decision on the project.

In Hungary, the competent authority decides on whether or not to undertake environmental monitoring.

In the Netherlands, the competent authority is legally obliged to monitor the project. The proponent has to submit an evaluation report to the EIA Commission, the advisers and the public. The competent authority is required to take the necessary action when environmental impacts exceed those predicted in the EIS.

In *Norway*, the competent authorities may, when approving an EIS, direct the proponent to undertake more detailed studies before, during and after realization of the project with a view to remedying any adverse effects of the project and to confirm the predicted impacts of the project.

In *Poland*, although post-project analysis is not required by present EIA provisions, in practice a requirement of such an analysis is included in siting decisions, provided the EIA documentation has formulated a need for post-project analysis preparation. In some cases the competent authority may bind an owner of a structure in operation to prepare an environmental audit (called "EIA of an existing building or structure"), which is similar to a post-project analysis.

In the Russian Federation, one of the functions of State Environmental Reviews is to overview the implementation of the review findings. When the results of environmental monitoring, carried out by relevant competent authorities, including the Ministry of Environmental Protection and Natural Resources and its regional offices, show that the conditions set in the review have been infringed, it may be decided to restrict, interrupt or stop the activity concerned.

In Switzerland, PPA is not explicitly required by the Ordinance on EIA. However, it is possible in certain situations to apply PPA, for example in relation to the surveillance of the activity once implemented. PPA is also undertaken in relation to other regulations with respect to the protection of the environment such as the laws against nuisances and air pollution.

In Turkey, the Ministry of Environment carries out the necessary studies required to review and evaluate the activities carried out in the past so as to make use of previous experience in similar activities.

In *Ukraine*, the legal and standard regulations in force do not provide for post-project analysis. However, compliance with confirmed planning decisions during construction is monitored both by the project designers and by State monitoring bodies, including nature conservation bodies. In addition, units of the State Ecological Inspectors of the Ministry for Environmental Protection have been given the right to exercise State supervision of compliance with the requirements of the nature conservation legislation in the siting, construction, reconstruction and start-up of plant installations and other works.

In the *United Kingdom*, PPA is not required under existing legislation. However, when granting planning permission, local planning authorities can impose planning conditions. These may cover measures intended to prevent, reduce or remedy significant adverse environ-

mental impacts. There is a right of appeal to the Secretary of State against conditions imposed when granting planning permission. Conditions may also be imposed where the Secretary of State decides on a planning application following appeal or call-in. A planning permission, including any conditions, is legally enforceable and planning authorities employ enforcement officers for this purpose. If a breach of the conditions occurs, the local planning authority can, subject to certain limitations, issue an enforcement notice requiring the breach to be remedied. There is a right of appeal to the Secretary of State against an enforcement notice and, before deciding such an appeal, he may hold a public local inquiry. The Secretary of State's decision on the appeal may be challenged in the Courts on a point of law. Once an enforcement notice has taken effect, failure to comply with it is a criminal offence liable to a fine. In addition to the powers to issue an enforcement notice in respect of a breach of condition, a local planning authority may also serve a notice known as a "breach of condition notice" requiring the developer or any person having control of the land to comply with the conditions within a specified period, which must be not less than 28 days, or face prosecution. There is no right of appeal to the Secretary of State against such a notice, though its validity may be challenged by application to the Courts for judicial review. In addition to the planning controls described above, the operation of a major new industrial process is likely to be regulated by Her Majesty's Inspectorate of Pollution (HMIP) under the Environmental Protection Act of 1990, which brought into force a system of Integrated Pollution Control (IPC). HMIP inspectors have the power to enforce the conditions of an IPC authorization through a system of enforcement notices and prohibition notices. Operators are required to undertake monitoring to demonstrate compliance with the release limits specified in the authorization. Monitoring may include the measurement of process conditions, monitoring of releases and environmental monitoring within the area of the process. The monitoring scheme for each process forms part of the IPC authorization and is entered into the Public Register along with the rest of the authorization. Regular monitoring returns are submitted to HMIP; these are reviewed by inspectors to establish whether the operator is complying with the conditions of the authorization. Further regulatory checks are made by a programme of inspections of each IPC process. Monitoring results submitted by operators are available for public examination through the Public Register held in HMIP offices.

II. MECHANISMS FOR THE IMPLEMENTATION OF THE CONVENTION

More and more countries in the ECE region are finalizing their internal procedures for transforming the provisions of the Convention into national legislation, while in other countries, due to their administrative systems, the Convention is directly applicable.

In *Albania*, no special regulations have been approved and the provisions of the Convention are directly applicable.

In Austria, sections 10 and 17 of the Federal Act on EIA and Public Participation include provisions related to the undertaking of transboundary EIA in order to implement the Convention. The comments of the authorities and the public of the affected country, and the results of the consultations in accordance with Article 5 of the Convention, will have to be taken into account in the final decision on the proposed activity together with the outcome of the national EIA procedure.

In *Belgium*, it is clear that the different EIA regulations in the three regions may cause problems when applied in the regional transboundary context (e.g. a project which crosses the regional borders or which has significant adverse effects in another region), especially given the divergent approaches to public participation.

To solve transboundary problems the three regional governments have concluded a cooperation agreement on the exchange of information about projects with regional transboundary effects. This agreement was concluded within the existing constitutional framework and came into force on 4 September 1994. It has been called a "minimum" agreement and offers general procedural provisions based on the different regional requirements:

- —The agreement can be applied to every project for which an EIA is required according to a regional EIA regulation or a decision from a competent authority;
- —The notification by the region of origin to the possibly affected region that a licence application has been received for a project for which an EIA is required and which could have transboundary effects;
- —When there may be transboundary effects according to the region of origin or at the request of the possibly affected region, the EIS, when finished, is sent by the region of origin to the affected region before the consultation of the public provided for by the EIA procedure is organized;
- The region of origin notifies the possibly affected region about the start and duration of the public inquiry before this consultation of the public is organized. Concerning the public inquiry, interested inhabitants of the possibly affected region can participate in the same way as inhabitants of the region of origin. The government of the possibly affected region can always organize a public inquiry on its own territory and inform the region of origin about the results. However, the application of these provisions may not lead to a prolongation of the duration of the public inquiry provided for by the EIA regulation of the region of origin;
- Disputes about the interpretation or application of this cooperation agreement are settled by the means provided for by the laws of the institutional reform.

Almost one year after coming into force, this cooperation agreement cannot yet be evaluated as it has been applied in only one recent case. Nevertheless, it seems that more detailed arrangements may be necessary to make the cooperation agreement effective. According to the constitutional and legal provisions, the procedure

for the ratification of the Convention by Belgium has been initiated with the approval of a draft decree by the Flemish government on 16 May 1995, after which the approval by the other regions and at the federal level can take place in order to finalize the ratification of the Convention by Belgium.

In Bulgaria, pursuant to the legal provisions on EIA, the Minister of Environment issues instructions for each particular project, activity or facility causing transboundary pollution.

In Canada, the EIA Convention will be implemented by both the federal and provincial levels of government. This understanding was confirmed by the signing by the Council of Canadian Ministers of the Environment (CCME) of the Environmental Assessment Harmonization Framework Agreement in November 1992, which included a clause on the ECE Convention on EIA in a Transboundary Context. Procedures to implement the Convention within Canada are currently being developed. If a proposed activity is likely to cause significant adverse transboundary effects, Canada, or the provincial or territorial department or agency responsible for the proposed activity, in consultation with the affected country, agrees to apply the Convention to a proposed activity. Under the transboundary provisions of the Canadian Environmental Assessment Act, the Minister of the Environment has the authority to refer a project directly to a mediator or panel, if the Minister believes that the project may cause significant adverse transboundary effects, even if the project would not require an assessment otherwise.

In Croatia, the 1984 Regulations do not include provisions for transboundary EIA. However, there are regulations that deal with the relations between local authorities across administrative boundaries, including provisions similar to those in the Convention such as the transmission of information on likely transboundary impacts, public participation in areas likely to be affected and arrangements for consultation. The current preparation of amendments to the 1984 Regulations is expected to provide an opportunity to incorporate the necessary provisions of the Convention.

In the Czech Republic, the 1992 Act on the Environment contains provisions that directly concern EIA in a transboundary context, including a description of the procedure to be followed, the list of proposed activities subject to EIA and the content of the EIA documentation. It is expected that the Act will be amended to further harmonize the legal provisions with the Convention.

In *Estonia*, new legislation is being prepared aimed at further implementing the provisions of the Convention. The bill will then be presented to Parliament for approval and subsequent ratification.

In Finland, when a project is likely to have a significant environmental impact on the territory under the jurisdiction of another country, the Act on EIA Procedure provides that the coordinating authority shall supply the Ministry of the Environment with the plan for preparing EIA documentation (during the scoping phase) for notification of the other country in accordance with the requirements of the Convention. The Ministry of the

Environment shall request the opinion of the Ministry for Foreign Affairs on the matter. In these cases the Ministry of the Environment or an appointed authority shall provide the authorities and natural persons and associations in a country Party to the Convention (or other relevant agreement) with an opportunity to participate in the assessment procedure in Finland.

In *Hungary*, the 1993 EIA Decree includes general provisions for activities that are likely to have a significant transboundary impact. The competent regional environmental authority decides whether or not the proposed activity may cause a significant transboundary impact. If so the Ministry for Environment and Regional Policy should be informed and take measures according to relevant international agreements. Compliance with provisions of the Convention requires additional regulation. The time-frame of the internal licensing procedure is not sufficient when foreign actors participate in this procedure. Although Hungarian legislation allows for such a participation, the recent regulation was not prepared with the aim of coping with extensive consultations and public participation.

In the Netherlands, the existing EIA legislation covers transboundary environmental impacts. In 1994 a special section dealing with EIA in a transboundary context was added. The legislation lays down the so-called dualtrack approach. The first track involves making use of contacts which already exist in border areas between the relevant local government agencies and their counterparts in neighbouring countries. The second track involves the Minister for Housing, Physical Planning and Environment, who is entrusted with the responsibility of maintaining contact with the Governments of the other countries concerned. If a planned activity in the Netherlands may have a significant impact on the environment of another country, the decision-making authority, in most cases the provincial government, will play a leading role in transboundary contacts and, wherever possible, use will have to be made of existing transboundary consultative forums. The Minister for Housing, Physical Planning and Environment will be responsible for maintaining formal contact at the national government level.

If a proposed activity in a neighbouring country may have a significant impact on the environment in the Netherlands, the Minister for Housing, Physical Planning and Environment will be the contact point for the neighbouring country in question, unless decided otherwise in bilateral agreements. In most cases the Minister will transfer the information received from abroad to the relevant local authorities in the affected area in the Netherlands.

When it is obvious from the information to the competent authority that a proposed activity in the Netherlands may have a significant impact on the environment in another country, this authority will have to inform the Minister for Housing, Physical Planning and Environment. This authority will be required to publish the information in the areas of the affected country that are likely to be affected and send the notification to the point of contact of the affected country. The Minister will inform the Government of the affected country. The authorities and the public of the affected country will be

informed of the EIA procedure and of the possibilities for contributing to the process and the deadlines for doing so. The input from the affected country will be taken into consideration when establishing the project-specific guidelines. Once the EIA documentation has been completed, the competent authority will inform the Minister and will publish this document in the area likely to be affected and provide the relevant authorities of the affected country with the EIA documentation. The Minister will inform the Government of the affected country. In accompanying letters, information will have to be provided on the EIA procedure and the timetable for comment. The affected country will be asked to indicate whether it wants to enter into consultation within a specified time in order to minimize delays in the decision-making procedure. The competent authority in the Netherlands will have to take the results of the consultations into consideration when making the final decision. The Netherlands ratified the Convention in February 1995.

In Norway, the implementation of the Convention will not require substantial changes to existing national legislation with the exception of arrangements for the notification of an affected country and for the preparation of the part of the EIA documentation related to transboundary impacts.

In Slovenia, the Environmental Protection Act includes a provision which stipulates that when a proposed activity is likely to affect the environment of another country, the Ministry of the Environment and Physical Planning, through the Ministry for Foreign Affairs, will inform such countries of the proposed activity and transmit all relevant information.

In Spain, the local authorities, in particular the environmental authority of the concerned region or community, will be responsible for the implementation of the Convention. These authorities will manage the EIA procedure and will arrange for the transmission and reception of the EIA documentation, through the point of contact in accordance with Article 3 of the Convention.

In Sweden, Articles 9 to 11 of the Government Ordinance on EIA arrange for the undertaking of EIA in a transboundary context. The competent authority, the Swedish Environmental Protection Agency, is responsible for the announcement of information in Sweden and any other country concerned according to the provisions of the Convention. The competent authority shall furthermore enter into consultation with the competent authority of the affected Party or with any other authority concerned. It is normally the responsibility of the proponent to decide on the content of the EIA and any participation, by the authorities or the public, before a legal procedure is initiated. The decision maker can, afterwards, in the formal proceedings, refuse permission if the material is insufficient.

In the *United Kingdom*, the Convention will be implemented by administrative measures, no additional legislative provisions are envisaged. The Secretary of State, who receives a copy of all environmental statements and related planning applications for projects requiring planning permission, will notify planning authorities whenever consultation with another country appears

necessary. In such cases, the Secretary of State will make the necessary arrangements so that planning permission is not granted until consultations with the affected country have taken place. The affected country will be invited to participate and its comments will be taken into account by the competent authority before a decision is taken on whether the project should be allowed to proceed.

III. EXPERIENCES WITH TRANSBOUNDARY EIA

As the moment of the entry into force of the Convention is drawing near, it seems that ECE member countries are strengthening their experience with transboundary EIA by applying the provisions of the Convention to an increasing number of cases.

In Albania, there have been no projects which require the implementation of EIA in a transboundary context. A possible case in the future will be the construction of the highway from Durres to Kapshtice (Albanian-Greek border).

In *Belgium*, before the formal agreement between the Flemish region and the Netherlands, concluded in December 1994, rather informal contacts and exchange of information regarding EIA for projects located in the border region already took place between the Flemish regional and provincial authorities and the Netherlands national and provincial authorities. For more complex projects, such as the high-speed railway between Antwerp and Rotterdam and the River Meuse project, specific ad hoc approaches were agreed upon between the authorities.

In Canada, an EIA involving consultation with other countries has been conducted for several projects. Although the Convention was not formally applied, consultation with other countries was conducted in the following public reviews: Beaufort Sea, Celgar Mill Expansion, Rafferty-Alameda Dam, Arctic Pilot Project, and Eastern Arctic Offshore Drilling.

In Croatia, the application of EIA in a transboundary context has taken place with Hungary in relation to the planned construction of a hydropower plant on the river Drava. As this was a joint investment, an EIA was undertaken according to the national law of each country and the remaining questions were dealt with through joint expert groups and meetings of relevant governmental authorities. Other examples which included the transmission of information to affected countries are the EIA procedures for the hydropower plant Podsused on the river Sava; the motorways Zagreb-Krapina-Maribor-Sentilj (Pyrn motorway), Rijeka-Trst, and Zagreb-Varazdin-Hungary; and the hydropower plant on the river Kupa with Slovenia.

In Estonia, EIA in a transboundary context is being applied to the reconstruction of the Ainazi Port in Latvia, located less than one kilometre from the border between Estonia and Latvia. The preparation of EIA documentation is intended to support the assessment of potential impacts on the coastal areas of the Baltic Sea.

In Finland, the first notification according to the Convention was sent to Sweden in late spring 1995. The

notification included information on plans to build the Vuotos artificial lake (i.e. large dam and reservoir) in Lapland. It is likely that the building of the reservoir will have an adverse impact on the water quality in the Bothnian Bay, which is also on Swedish territory. According to some other agreements and arrangements Finland and its neighbouring countries have cooperated in connection with permission procedures for the planned projects. Cooperation usually consists in transmitting information and relevant authorities further negotiating. Procedures may vary from case to case. The implementation of the Convention is expected to bring uniformity to the transmittal of information as well as to arrangements for participation.

In 1992, relevant authorities in *Hungary* and Slovakia decided to undertake an EIA in accordance with the provisions of the Convention in relation to a planned waste incinerator in Sturovo (Slovakia) close to the border. To study relevant data it was agreed that consultations would be entered into in particular to identify whether the proposed activity was likely to cause a significant transboundary impact. Competent authorities and local municipalities in Hungary, which were informed of the proposed activity, identified important environmental issues.

In the Netherlands, the provisions of the Convention pending its entry into force were applied in a number of cases, although the formal national legal obligation to do so came into force only recently.

In *Poland*, the Ministry of Environment Protection, Natural Resources and Forestry has notified the appropriate authority in Germany of a proposed sewage treatment plant in Leknica and Belarus of a proposed sewage system and sewage treatment plant in Kuznica Bialostocka, following the relevant provisions of the Convention pending its entry into force. The Ministry has received notifications from Germany in relation to a proposed waste incineration plant in Schwedt and an ammunition disarmament plant in Steinbach.

In Sweden, the Convention was applied to the proposed fixed link across Öresund. The EIA documentation for this large project was sent on 22 September 1992 to all countries around the Baltic Sea together with a notification in accordance with Article 3 of the Convention. The time-limit for response, indicating whether the country intended to participate in the EIA procedure, was three months. The EIA documentation and the notification were both in English. Translation into other languages was discussed but was finally regarded as not necessary. Because the Convention had not yet entered into force and therefore no competent authorities had been designated, the formal procedures normally used by the Ministries of Foreign Affairs were followed. One country, Finland, replied to the notification in time. It is important to point out also that all countries around the Baltic Sea were invited to propose experts for a panel which was instructed to examine and evaluate the effects of the Öresund link on the marine environment in the Baltic Sea and in the Öresund and, if necessary, propose further investigations. Finland later also took part in a meeting in Sweden where information on the formal procedure for the final decision was submitted.

In Turkey, the EIA Regulation is in conformity with the provisions of the Convention. The purpose of this Regulation is to regulate the administrative and technical principles which will be followed during the EIA process to identify and evaluate all possible impacts on the environment of investment decisions of all public or private organizations, institutions and agencies which propose activities that may cause environmental problems; to prevent or mitigate the adverse impacts to such an extent that they would not harm the environment and to assess the alternatives to the proposed activities. This Regulation also covers the technical and administrative principles which will be followed during the EIA procedure; the types of activities and areas for which the Environmental Impact Statement (EIS), initial environmental assessment check-list and the evaluation matrix which will be drawn up according to the principles, are required; its contents; the principles that will be followed during the review and evaluation, the competent authorities for monitoring and auditing, the working principles of the Review and Evaluation Commission and the issues related with the determination of the institutions and agencies which will prepare the EIS initial environmental assessment check-list and the evaluation matrix.

An example of EIA in a transboundary context is the procedure followed by Ukraine and Belarus in the construction of a building materials plant (and the development of a raw materials quarry for it) on the territory of Belarus. The plant is being built in the immediate vicinity of the border with Ukraine and may have a significant adverse impact on the ecological systems situated on Ukrainian territory, in particular on the Shatsky National Nature Park and its system of lakes. To resolve any ecological problems which might arise, meetings and consultations are being held between delegations of the two countries with a view to devising nature conservation measures which would keep to a minimum any possible adverse impact of the plant, and especially of the quarry, on the natural environment of both Belarus and Ukraine.

In the *United Kingdom*, the Department of the Environment of Northern Ireland has notified the Department of the Environment of the Republic of Ireland of several proposed activities, such as a proposed port development and a proposed pulp mill in Lisahally, a proposed 110 kV stand-by connection overhead power line in Strabane, a proposed 110 kV overhead power line in Enniskillen, and the application for a 165 MW wind farm on Slieve Rushen. The planning applications and supporting documentation were also forwarded for comments and the comments received were taken into consideration when making planning decisions.

IV. BILATERAL AND MULTILATERAL AGREEMENTS OR OTHER ARRANGEMENTS OF RELEVANCE TO THE CONVENTION

A number of existing bilateral and multilateral agreements are being used by ECE member countries in order to implement relevant provisions of the Convention. New agreements are also being drafted for that purpose and other cooperative arrangements are being made.

In Albania, an agreement is being prepared with the former Yugoslav Republic of Macedonia at the municipality level (between the cities of Progradec (Albania) and Ohrid (The former Yugoslav Republic of Macedonia), regarding the pollution level and the quality of Ohrid waters. Lake Ohrid lies between both countries and is a specially important area according to the United Nations Educational, Scientific and Cultural Organization. The first contacts between the municipal authorities of the two cities took place in December 1993.

Austria is a party to some agreements on the protection and use of transboundary waters which include provisions similar to those of EIA such as provisions on the transmission of information related to projects, the transmission of comments, and consultations (see also part four of the present publication).

In Belgium, on 12 December 1994 an agreement was signed between the region of Flanders and the Netherlands regarding EIA in a transboundary context. This agreement will be applied for a certain period, after which it will be evaluated and—if necessary—modified. This agreement describes the different steps to be taken to implement the principles and provisions of the Convention within the present Flemish and Netherlands EIA legislation.

Bulgaria is a party to several bilateral and multilateral agreements related to transboundary pollution such as the agreements on the protection and use of transboundary rivers with Greece and Turkey and a convention between Bulgaria and Romania on environmental protection. Bulgaria also signed the ECE Conventions on the Transboundary Effects of Industrial Accidents and on the Protection and Use of Transboundary Watercourses and International Lakes, as well as the Conventions on the Protection of the Black Sea Against Pollution and on Cooperation for the Protection and Sustainable Use of the Danube River.

The agreements on transboundary environmental cooperation and exchange of information which Canada has entered into are; the International Joint Commission (Boundary Waters Treaty, Canada-United States, 1909); the International Porcupine Caribou Board; the Agreement between the Government of Canada and the Government of the United States of America on Air Quality; and the North American Agreement on Environmental Cooperation between the Governments of Canada, the United Mexican States and the United States of America.

In Finland, in many cases the relevant cooperation regarding environmental impact assessment in a transboundary context is done through joint bodies. The mandate of these joint bodies and the means of cooperation are defined in the relevant bilateral or multilateral agreements. Finland is a party to such joint bodies or similar kinds of regular cooperation according to several agreements. Some of the agreements contain provisions on the right of the parties to get information on a planned project and participate in the planning and permit procedures.

In *France*, several bilateral agreements with neighbouring countries include provisions on the exchange of

information related to activities which are likely to have a significant transboundary impact on the environment. This is the case in particular with the tripartite intergovernmental commission of the Governments of France, Germany and Switzerland. It was decided that these countries would inform and consult each other on activities which are likely to have a significant adverse environmental impact outside the territorial borders but within the competence of the tripartite intergovernmental commission.

In *Hungary*, bilateral agreements on transboundary waters with neighbouring countries relate to activities which might have an adverse impact on the quality and quantity of these waters, and include provisions for the submission of information on such impact. The bilateral agreement between Hungary and Ukraine on environmental cooperation provides for cooperation on EIA for proposed activities which may have an adverse environmental transboundary impact.

In the Netherlands, bilateral agreements are considered important for the proper implementation of the Convention although not a precondition for its application, ratification or entry into force. Initiatives were taken by the Netherlands Government to start bilateral discussions with Belgium (region of Flanders) and Germany. The agreement with the Belgian region of Flanders has recently been approved at the central government level as well as by the provincial authorities. It was decided to apply the agreement for a certain period, and then to evaluate it. The discussions with Germany are also in an advanced stage. Within a reasonable time an agreement may be reached on details for the procedure for EIA in a transboundary context. Both agreements include details related to such items as:

- —The nomination of points of contact at a local government level;
- -The information to be exchanged;
- —In which language the information has to be submitted and who pays for translation;
- —How and in which stage of the EIA process the authorities and the public in the affected country are informed and involved; and
- —Threshold levels and/or more specific criteria for defining the significance of transboundary impact.

Norway is cooperating with other Nordic countries through the 1974 Nordic Environmental Protection Convention, which contains provisions similar to those included in the EIA Convention. Under the auspices of the Nordic Council of Ministers an ad hoc working group on EIA was established in 1989 to exchange information on legal and other developments of EIA, to discuss matters for international cooperation and to initiate and organize research projects and seminars.

Poland has bilateral agreements in force, though at present in renegotiation, with all its neighbouring countries on the management of transboundary waters and with most of its neighbours on the protection of the environment. The agreements include provisions related to transboundary EIA. Joint commissions or working groups are established based on these agreements. They

are also working out practical ways of implementing the Convention's provisions.

Romania cooperates on EIA issues in a transboundary context through relevant existing mechanisms such as bilateral agreements with Bulgaria, Germany and the Republic of Moldova.

The Russian Federation is involved in the preparation of bilateral agreements on environmental protection with other member countries of the Commonwealth of Independent States (CIS) and with China, Latvia and Lithuania. Each of these agreements is expected to include provisions related to the EIA Convention. Cooperation on EIA is included in a 1992 bilateral agreement with Finland. In 1992, the Agreement on Cooperation concerning Environmental Protection and Improvement between Armenia, Belarus, Kazakstan, Kyrgyzstan, the Russian Federation, Tajikistan and Uzbekistan was concluded. The parties to the Agreement agreed to set up an Intergovernmental Ecological Council, whose task it is, inter alia, to conduct environmental reviews of programmes and projects whose implementation can have an impact on the environment of two or more parties, and to assist in resolving disputes between parties. The Agreement also contains provisions related to:

- —The harmonization of national acts, norms and standards for environmental protection and management;
- —The application of common approaches, criteria, methods and procedures in relation to EIA by ensuring the comparability of relevant data;
- —The utilization of common methods for the prediction of environmental impacts; and
- —The drawing-up and implementation of a coordinated research programme.

In Sweden, the Nordic Council of Ministers approved a mandate for the Nordic ad hoc group with representatives from Iceland, Norway, Denmark, Sweden, Finland and the Aland Islands in 1993. According to its mandate, the group shall consider the possibilities of arriving at a common view on the use of environmental impact assessment in the planning procedure within the Nordic countries. The group shall suggest guidelines for the use of EIA in strategic planning. Finally, the group is expected to put forward proposals on how to integrate EIA in higher education and in the training of authorities. Its term is three years, until the end of December 1996.

Ukraine has signed bilateral environmental protection agreements with a number of neighbouring countries, such as Hungary, Poland and the Republic of Moldova. Preparations are being made for the signature of bilateral treaties with Belarus, the Russian Federation and Slovakia.

In the *United Kingdom*, the Department of the Environment of Northern Ireland has a bilateral agreement with the Department of the Environment of the Republic of Ireland whereby notification is given of any proposed activity which is likely to have a significant environmental impact in the other country.

V. OTHER ASPECTS

A. Application of EIA principles to policies, plans and programmes

It is generally recognized in ECE countries that governmental policies, plans and programmes may have significant direct or indirect environmental impacts. To take these impacts fully into account, policies, plans and programmes could be subject to EIA.

In Armenia, the bill on EIA for economic activities is expected to include provisions for applying EIA also to policies, plans and programmes.

In *Bulgaria*, EIA is mandatory for national and regional development programmes, including landscape development plans and urban development plans and their alterations.

In Canada, the Government has established a nonlegislated EIA process that applies to policy and programme proposals submitted to the federal Cabinet for consideration. The environmental assessment of policies and programmes requires that environmental information should be considered in the same way as other factors (i.e. economic, social and cultural) in developing policy and programme proposals. As part of this process, a statement of the environmental implications and mitigation or management of potential impacts is to be made public when a new policy or programme is announced. A document entitled "The Environmental Assessment Process for Policy and Program Proposals" was developed to set out the requirements for the implementation of the process by the federal Government. Completion of additional materials to assist in the implementation of the process and to provide guidance are under development.

In *Croatia*, EIA is normally not applied to policies, plans and programmes, although the physical planning procedures contain provisions that deal with impacts on the environment and mitigation measures.

In the Czech Republic, relevant provisions of the 1992 Act on EIA concern the assessment of so-called concepts which are submitted for approval to central authorities of the State Administration for energy, transport, agriculture, waste treatment, mining and processing of minerals, recreation and tourism. Physical planning documentation and general water management plans are also considered as concepts. The EIA procedure for concepts is different from the one for projects.

In Finland, the assessment of environmental impacts in the preparation of policies, plans and programmes is already required in the regulations regarding committee work, the compilation of national government action and finance plans and the drafting of government bills. The assessment of the environmental impact is still not sufficiently prominent in the formulation of policies, plans and programmes with a significant environmental impact. According to the Act on Environmental Procedure, environmental impacts shall be investigated and assessed to a sufficient degree when an authority is preparing policies, plans and programmes which may have significant impacts once implemented. The Council of State may, according to the Act, issue general guidelines on

assessing the environmental impact of policies, plans and programmes. The aim would be to streamline practices and procedures at various levels of government.

In France the 1976 Law provides that the physical planning documentation should also take into account the related impacts on the environment. Physical planning procedures, whether general or local, have to respect the same environmental objectives as those defined at the project level. Recently, the French Parliament introduced environmental assessment at the higher policy level: since 1990, it has to be demonstrated that bills have taken into account impacts on the environment, before they can be adopted. The 1993 decree concerning EIA introduced the following two important elements:

- —At the project level when several activities belonging to the same programme are implemented at the same time the programme itself requires an EIA;
- —When the implementation of these activities at the project level is implemented gradually for financial reasons, the EIA for each of the activities has to include an estimation of the overall impact of the entire programme.

In the Netherlands, the provisions of the EIA legislation are also applicable to several decisions at the plan level, such as energy, waste management, water-supply and land-use plans. In addition to this a so-called environmental assessment is being developed for strategic decisions at the policy level. An important starting-point for environmental policy-making in the Netherlands is to ensure that environmental concerns are taken into account in an early phase of decision-making. It is also clear that the Minister for the Environment does not bear sole responsibility for the environment; the departments of, for instance, agriculture, economic affairs or public works are also involved. Therefore, it is important that environmental policy is integrated in the policy of other departments. In the Netherlands this is defined as the "external integration" of environmental policy. In the first National Environmental Policy Plan (NEPP) it was already noted that the external integration was not well developed. That is why it was stated that any proposals (plans, programmes or laws) with important impact on the environment should be accompanied by information on that impact. The aim is to find more and complementary mechanisms to advance the process of external integration. One of the actions to model external integration is to stimulate the integration of environmental concerns into policies of the other ministries, by screening existing instruments for their effects on sustainable development. Since this action deals only with existing instruments, an advisory committee has been asked to report on ways of organizing environmental assessment for national government policy proposals. The committee has formulated a number of recommendations with the intention of giving the environmental aspects a more explicit and important place in the decision-making process. This system of mechanisms is called "environmental assessment". The graph below shows the system of existing and new provisions; they are divided according to a product or sector relation and whether the environmental aspects are explicit in the policy documents. New instruments are indicated in bold, existing instruments in normal print.

	Implicit:	Explicit:
product-related	 Official and ministerial consultation procedures to prepare Cabinet decisions 	• EIA • Environmental paragraph
	 (Co-)signature by the Minister for the Environment 	
sector-related	Help desk	• Environmental Review Committee
	 Certification decision-making process 	

The environmental assessment focuses on existing instruments such as EIA and the (co-)signature of important policy papers by the coordinating Minister for the Environment and new instruments such as the environmental paragraph, the environmental review committee and the possible certification of the decision-making process of governmental organizations. The coordinating Minister for the Environment plays an important role in verifying the quality of the environmental information and the conformity with the existing environmental policy. The committee completed its report in September 1993, so recommendations are now being implemented. In the second National Environmental Policy Plan it is stated that new policy proposals which may have a significant environmental impact have a paragraph dealing with environmental aspects. At this moment the discussion on how to organize this process is being undertaken. For the implementation, the Government has formulated a number of underlying principles: with the introduction of the environmental paragraph, it is intended to give environmental concerns centre stage in decision-making at the national level concerning policy proposals with potentially significant impact on the environment and related to sustainable development. That environmental paragraph therefore forms an aid in decision-making. The environmental paragraph does not replace the EIA but is intended to apply to policy proposals not subject to such a requirement. The drafting and use of an environmental paragraph may not lead to a delay in decision-making and will therefore be integrated into the existing planning and decision-making processes in an efficient manner. The scope and detail of the environmental paragraph accompanying a policy proposal must be geared to the environmental interest and the nature of the policy proposal in question. The intention is to implement the environmental paragraph in a low-key manner. The first year, 1994, was an experimental year; from 1995 every department is obliged to add such paragraphs.

Important issues at the implementation phase include the following:

- —The initiating ministry is responsible for the preparation and the content of the environmental paragraph;
- The paragraph is primarily focused on the impact of a proposed policy on the environment and sustainable development, and the possibilities to advance sustainable development with this new policy and to reduce the adverse environmental effects. In order to support this, the committee has made a check-list with questions as a basis for the environmental paragraph. Apart from the "classic" environmental impacts (i.e.

emissions), this will also concern the contribution to sustainable development in the form of energy conservation, integrated life-cycle management and quality improvement;

The paragraph deals with all proposed policies of all ministries with possible important impacts on the environment which need a decision of the Council of Ministers. The ultimate goal is that as many policy proposals as possible with important impact on the environment are accompanied by an environmental paragraph. As regards the other recommendations of the committee (the Environmental Review Committee, the help desk and the research for the possibilities for certification of the decision-making process), the Cabinet is preparing its opinion.

In Norway, although there are presently no legal requirements to apply EIA to policies, plans and programmes, the environmental impacts of certain governmental policies have been assessed, such as general plans to develop hydroelectric resources or the opening of new areas for offshore oil and gas exploration.

In the Republic of Moldova, guidelines are being prepared to make EIA part of the process of drawing up government decisions, plans and programmes with likely environmental impacts. The basis for these guidelines will be the territorial Master Plan for Environmental Protection for the period up to 2010 which was prepared in 1992.

In the Russian Federation, EIA principles are not applied to policies, plans and programmes. However, in the draft legislation being prepared by the Ministry of Environmental Protection and Natural Resources, the EIA requirements will apply to all documentation produced in the process of preparing and taking decisions, including policies, plans and programmes for socioeconomic development, and regulatory and legislative activities.

In Slovenia, the Environmental Protection Act stipulates that EIA should be undertaken at two levels. First, a comprehensive assessment of the environmental impacts should be undertaken at the policy, plan and/or programme level. An EIA will also have to be applied to activities at the project level. Moreover, the authority responsible for national and local planning documents and sectoral natural resource management plans requires a licence from the Ministry of the Environment and Physical Planning before their adoption. The Ministry grants such a licence on the basis of an EIA.

In Sweden, the Government in 1993 proposed through a government bill that descriptions of environmental consequences should be an element in government bills and other proposals at strategic levels and that the authorities should take into account the environmental consequences before they pass instructions and general guidelines.

The legislation of *Ukraine* does not require the application of EIA principles to policies, plans and programmes. However, the content of EIA information relating to industrial development plans is governed by the instructions of the Ministry for Environmental Protection on the form and content of EIA information relating to planned economic activities.

In the United Kingdom, the "Policy Appraisal and the Environment" guide was prepared to increase awareness of the need to examine the environmental impacts of policies and to offer a structured model for the consideration of environmental issues within policy analysis. All major policy proposals to the Cabinet and Cabinet Committees must include an appraisal of their environmental implications. The 1991 Town and Country Planning (Development Plan) Regulations require planning authorities to have regard for environmental considerations when preparing their general policies and proposals in development plans. The 1992 Planning Policy Guidance Note 12 issued by the Department of the Environment underlines that environmental implications of policies and proposals should be systematically appraised as part of the plan preparation process. This has to be done in addition to the existing requirement for certain types of development proposal to be subject to an EIA before planning permission is granted. This requirement enables planning authorities drawing up development plans to take decisions based on a full evaluation of the environmental and other costs and benefits. The outcome of the appraisal has to be set out in the development plan's explanatory memorandum or reasoned justification demonstrating that environmental considerations have been part and parcel of the planning process.

B. Research initiatives

Specific research programmes of relevance to EIA have been undertaken and institutional arrangements have also been made.

In *Belgium*, in the region of Flanders a number of research projects on EIA (post-project analysis; policies, plans and programmes) are currently being undertaken. A project regarding the formulation of EIA guidelines for particular projects has recently been finished.

In Canada, in June 1993, the Canadian Environmental Assessment Agency launched the International Study of the Effectiveness of Environmental Assessment, in collaboration with the International Association for Impact Assessment (IAIA). The Study was commissioned to:

—Review recent trends, key issues and emerging directions in EIA;

- Examine the contribution of EIA to problem solving and decision-making;
- —Identify and document elements of EIA systems that work well; and
- —Recommend cost-effective measures for improving the application and management of EIA.

Ten themes were identified for the Study and these are grouped into four main categories:

- Foundations of EIA, focusing on guiding principles, values and codes of practice;
- (ii) New direction of EIA, focusing on strategic environmental assessment (SEA), cumulative and large-scale effects and sustainability;
- (iii) Process strengthening, focusing on major components of EIA at the project level;
- (iv) Capacity building, focusing on research, training, networking, institutional development and professional skills.

As part of the Study, an international EIA Summit was held June 12-14, 1994 in Quebec City, Canada. The Summit brought together senior officials from 25 national agencies responsible for managing EIA systems and from seven international organizations with responsibility for the practice of EIA. The objectives of the Summit were to review progress on the Study, exchange information and views on current issues and emerging trends in EIA, and consider practical approaches for strengthening EIA practices.

The EIA Summit's Agenda for Action consisted of three interrelated initiatives:

- (i) Endorsing and expanding support for the International Study of the Effectiveness of Environmental Assessment;
- (ii) Désigning and establishing an international on-line network to enable EIA managers to communicate with one another and exchange information; and
- (iii) Clarifying the concept of EIA capacity building, and actively supporting and coordinating capacitybuilding initiatives through the Study.

A number of activities are being undertaken in collaboration with study partners to gather information. These include international workshops, questionnaires, case-study, country status reports and EIA decision analyses. The Study has significantly expanded in size since it was initiated and promises to assist continuing efforts to strengthen EIA as a practical tool for decision-making in support of sustainable development.

In Croatia, research programmes have been carried out recently, inter alia, on the standard format and content for the EIA for nuclear and thermal power plants, on the comparative analysis of air pollution models for use in EIA related to thermal power plants, and on principles for the implementation of legal regulations of EIA.

In Finland, the general responsibility for supervising and developing EIA rests with the Ministry of the Environment. Other ministries direct and develop EIA procedures in their respective spheres of competence. The National Board of Waters and the Environment acts as the expert authority for further developing EIA. Special attention is being paid to ensure that the findings of the EIA procedure are fully taken into account in the final decision. Part of that work is to develop practical ways to review the quality of the assessment reports and the procedure itself. Training and information are being intensified in administration, as well as in citizens' and industry organizations. The National Board of Waters and the Environment is carrying out research on the use of EIA at policy-level decision-making. The main objective of the research, which is concentrated on agricultural policy-making, is to evaluate factors that influence the use of environmental information in planning. It is also being carried out in order to develop criteria for determining the significance of an impact, as well as ways and means to develop and enhance public participation.

In *Hungary*, the Ministry for Environment and Regional Policy has initiated research programmes to promote the application of EIA. The objective of ongoing programmes is to provide new guidelines to environmental, nature conservation and public health authorities on using EIA in decision-making.

In Sweden, approximately 20 institutions are engaged in research regarding different EIA-related subjects. Furthermore, the first steps have been taken to create a network of authorities and institutions that are involved in EIA.

In the *United Kingdom*, following implementation of new requirements under the 1991 Town and Country Planning (Development Plan) Regulations, the Department of the Environment commissioned research into the environmental appraisal of development plans. The objectives of the research are to: (i) evaluate planning authorities' procedures for conducting the environmental appraisal of plans; (ii) assess the effect of environmental appraisal in the policy-making process; (iii) examine how authorities and others view the process and advice on environmental appraisal; and (iv) consider whether there is any further guidance that the Department could give on the environmental appraisal of plans. Other research projects which are being carried out will lead to the publication of guidance on good practice in the preparation of EIA documentation for projects subject to the Town and Country Planning procedures (final version due to be published in summer/autumn 1995) and the evaluation of environmental information for these projects (published in October 1994). In July 1994 the Department of the Environment published a collection of case-studies on "Environment Appraisal in Government Departments" as a follow-up to a guide on "Policy Appraisal and the Environment" published in 1991. As part of the development of the Integrated Pollution Control regulatory system, in which multimedia environmental impacts must be considered, guidance is being formulated on assessing the environmental effects of major industrial processes and determining the best practicable environmental option. This guidance is expected to assist both operators and inspectors to identify potential environmental impacts, to establish the magnitude of any impact on the environment and to evaluate the significance of any impact in relation to specified regulatory criteria.

C. National centres on EIA

Information on centres dealing with EIA, as reported, is presented in annex III below.

ANNEXES

Annex I

EXAMPLES OF LISTS OF PROJECTS IN RELATION TO ENVIRONMENTAL IMPACT ASSESSMENT IN THE ECE REGION

List of projects requiring EIA in Austria

- -Particle accelerators in excess of 50 MeV, except those used for radiation therapy purposes; -Plants for the thermal treatment of hazardous -The construction of railway lines, except for highwaste: performance routes that are already covered by section 24, with a total length of 10 km, as well as for -Plants for the recycling of materials or for otherthe modification of railway lines with a length of more wise treating hazardous waste or used oils with a minithan 10 km, if the centre of the outermost track of the mum capacity of 20,000 tons per year; modified line is at a distance of more than 100 m from the outermost track of the existing line; -Landfills and underground waste dumps for hazardous waste: The construction of shunting yards with an average capacity of more than 1,000 railway cars per 24 hours; —Plants for otherwise treating non-hazardous waste. except sorting and further preparing, with a minimum -The new development or expansion of ski resorts capacity of 100,000 tons per year, in the case of thermal by means of ropeways for passenger transport (cabletreatment of non-hazardous waste with a minimum cacars) or towing lifts, if this involves a land need with pacity of 20,000 tons per year; changes in terrain in excess of 20 hectares to build new ski runs, as well as the new development of glacier ski -Landfills for waste materials with a minimum total resorts by means of ropeways or towing lifts; volume of 1,000,000 m³;
- -Landfills for inert materials and landfills for residual building bulk, and landfills for wastes of eluate class I pursuant to Austrian standard OENORM S 2072 and landfills for wastes of eluate class II pursuant to Austrian standard OENORM S 2072 with a minimum total capacity of 500,000 m³, until the decision pursuant to paragraph 18 of section 29 of the Waste Management Act has entered into force:
- -Plants which fall under the Clean Air for Boiler Plants Act, with a minimum thermal capacity of the fuel of 200 MW;
- -Plants where open radioactive materials, as defined by the Radiation Protection Act, are handled in an amount that exceeds 50 times the activity amount pursuant to the 1972 Radiation Protection Decree, Federal Law Gazette No. 47, Annex 12, "workplace type A";
- -Plants for the final storage of conditioned radioactive wastes:
- -Nuclear reactors, unless they are forbidden by the Nuclear Ban Act (Federal Law Gazette No. 676/1978), except in research facilities for the production and processing of fissile and breeder material, where the maximum output is not in excess of 1 kW thermal constant output;

- -Pipeline systems for the long-distance transport of oil and gas with a diameter of more than 800 mm;
- -The construction of new airports and airfields, except helicopter landing sites of public interest, as well as the construction of new or the expansion of existing runways for military aviation purposes for the operations of the federal army according to paragraph 1 of section 2 of the 1990 Defence Act, Federal Law Gazette No. 305;
 - —The exploitation of natural resources
 - (a) By way of underground mining with
 - -A land need for coherent overground mining plants in excess of 10 hectares; or
 - -A lowering of the surface by a minimum of 3 m;
 - (b) By way of open-cast mining with
 - A minimum output of 1 million tons per year; OF
 - —A minimum open area of 10 hectares;
- -Hydropower plants (dams, barrages, run-offs) with a bottleneck output of more than 15 MW, as well as chains of power stations (a sequence of two or more retaining areas for hydropower exploitation without any

intermediate free-flowing river section of a minimum length of 1 km);

- —The collection and discharge of waste waters, including waste-water treatment plants, which are dimensioned for population equivalent of more than 200,000 (EGW 100) CSB;
- —Dredgings in ballast quarries, with an open surface in excess of 10 hectares;
- —The layout or diversion of running waters with a mean flow rate (MQ) of more than 1 m³ per second along a construction section of more than 3 km;
- —Protective and flow-control structures with a construction length of more than 3 km along running waters with a mean flow rate (MQ) of more than 5 m³ per second;
- —Plants for the construction of cellulose, mechanical wood pulp, cellulose and chemical pulp, when using the sulphate pulping method at any rate, otherwise only with a production capacity in excess of 100,000 tons per year;
- —Plants for the production of paper, board or cardboard with a minimum production capacity of 300,000 tons per year;
- —Harbours, including coal and oil loading sites, that are accessible to vessels with a loading capacity of more than 1,350 tons;
 - -Factory farming beyond these dimensions:
 - -42,000 places for laying hens,
 - -84,000 places for pullets,
 - -84,000 places for broilers,
 - -1,400 places for fattening pigs,
 - -500 places for sows,

in the event of mixed stocks, the percentages of the actual number of places are added up; if the sum is in excess of 100%, an environmental impact assessment shall be made; stocks up to 5% of the number of places shall not be considered;

- —Plants for the composting of biogenic wastes, unless they already fall under the fourth item above, with a minimum capacity of 100,000 tons per year;
- —Plants for the industrial production of substances by means of chemical conversion that are connected with at least one further similar plant for reasons of process technology;
- —Plants where dangerous plant protection or pest control agents or their active ingredients (paragraph 5 of section 2 of the Chemicals Act) are produced, ground or mixed by machine, packaged or refilled, with a capacity in excess of 5,000 tons per year;
- —Plants for the production of iron and steel, including the attached treatment and processing plants, with a capacity in excess of 500,000 tons per year;

- —Plants for the production of non-ferrous metals with a production capacity in excess of 25,000 tons per year;
- —Foundries: for iron with a production capacity in excess of 200,000 tons per year; for non-ferrous metals with a production capacity in excess of 100,000 tons per year;
- —Plants for the application of metallic protective coatings on metal surfaces with an annual consumption in excess of 30,000 tons of coating materials;
 - -Plants for the roasting and sintering of ores;
- —Plants for the production of wood fibre and chipboard with a production capacity in excess of 250,000 tons per year;
- —Plants for the production of bricks with a production capacity in excess of 3,000,000 tons per year;
- —Plants for the production of cement, including asbestos, with a production capacity in excess of 300,000 tons per year;
- —Plants for the production of glass or glass fibres with a production capacity in excess of 200,000 tons per year;
- —Refineries for crude oil, except plants that produce only lubricants, as well as plants for the gasification and liquefaction of a daily minimum of 500 tons of coal or bituminous slate, as well as plants for the dry distillation of a daily minimum of 500 tons of coal;
- —Plants for the above-ground storage of crude oil, crude-oil products or natural gas with a minimum geometric filling capacity of 1 million m³;
- —Plants for the production, processing and working of asbestos and asbestos products, with regard to the production of asbestos cement for a production capacity in excess of 10,000 tons of finished production capacity per year—except for planned projects that aim to convert to asbestos-free manufacture—with regard to friction coatings for a production capacity in excess of 10 tons of finished products per year, in other uses for a material use in excess of 50 tons per year;
 - —Plants for the processing of animal carcasses;
- —Plants for the production of lead storage batteries with a minimum output of 1 million starter batteries or industrial cells per year;
- —Plants for the extraction of vegetable fats or oils with a production capacity in excess of 100,000 tons of oil-containing seed material per year;
- —Plants for the production of biological fuels, with a minimum production capacity of 20,000 tons per year;
- —Plants for the production or refining of sugar with a minimum production capacity of 120,000 tons per year;
- —Plants for the industrial production, processing, finishing, recovery or destruction of explosive substances;

- —High-voltage electricity lines according to item 10 of paragraph 1 of section 10 of the Federal Constitution with a voltage in excess of 110 kV;
 - -Forest clearings on areas in excess of 20 hectares;
- —The construction of hotels, including ancillary facilities, in excess of 1,000 beds or a land need in excess of 10 hectares outside of closed settlement systems.

List of projects requiring only public participation in Austria

- —(a) Plants for the treatment of hazardous waste, or for its storage for more than 12 months, in excess of 5,000 tons of hazardous waste;
- —(b) Plants for the treatment of non-hazardous wastes or used oils, except plants for sorting or processing, or plants for the composting of biogenic wastes with a minimum capacity of 10,000 tons per year, when pursuing the procedure under waste-management law;
- —Plants with a minimum thermal output of the fuel of 100 MW, when pursuing the procedure under the Clean Air for Boiler Plants Act;
- —(a) The construction of railway lines with a length in excess of 2 km, and the modification of railway lines with a length in excess of 2 km, if the centre of the outermost track of the modified line is at a distance of more than 100 m from the centre of the outermost track of the existing line;
- (b) The construction of new shunting yards or freight railway stations;
- —(c) The expansion of existing ski resorts by means of ropeways or towing lifts, if the construction of new ski runs involves a land need for changes in terrain in excess of 10 hectares,

when pursuing the procedure under railway law;

- —(a) Hydropower plants (dams, barrages, run-offs) with a bottleneck capacity of more than 10MW;
- —(b) Waste-water treatment plants dimensioned for population equivalent in excess of 100,000 (EGW 100) CSB;
- —(c) Plants for the production of paper with a minimum production capacity of 150,000 tons per year;
- -(d) Factory farming, in excess of these dimensions:
 - -21,000 places for laying hens,
 - -42,000 places for pullets,
 - -42,000 places for broilers,
 - —700 places for fattening pigs,
 - -250 places for sows,

in case of mixed stocks, the percentages of the actual number of places are added up; in excess of a sum of 100% the citizens shall be involved; stocks up to 5% of the places shall not be considered,

when pursuing the procedure under water rights law;

- —(a) Plants for the production or processing of substance, by chemical conversion, or for the storage of chemical substances with a production or storage capacity:
 - (i) For carcinogenic substances of category 1 or 2 with R 45, teratogenic substances with R 47 or mutagenic substances of category 1 or 2 with R 46 (items 12, 13 or 14 of paragraph 5 of section 2 of the Chemicals Act, Federal Law Gazette No. 26/1987) in excess of 250 tons;
 - (ii) For carcinogenic or teratogenic substances of category 3 with R 40 or very toxic substances (items 12, 14 or 6 of paragraph 5 of section 2 of the Chemicals Act) in excess of 500 tons; or
 - (iii) For toxic substances (item 7 of paragraph 5 of section 2 of the Chemicals Act) in excess of 1,250 tons;
- (b) Foundries: for iron with a production capacity in excess of 100,000 tons per year; for non-ferrous metals with a production capacity in excess of 50,000 tons per year;
- (c) Plants for the application of metallic protective coatings to metal surfaces with an annual consumption of coating substances in excess of 15,000 tons;
- (d) Plants for the production of wood fibre and chipboard with a production capacity in excess of 125,000 tons per year;
- (e) Plants for the production of bricks with a production capacity of more than 150,000 tons per year;
- (f) Plants for the production of cement, including asbestos, with a production capacity of more than 150,000 tons per year;
- (g) Plants for the production of glass or glass fibres with a production capacity in excess of 100,000 tons per year;
- (h) Plants for the above-ground storage of crude oil, crude-oil products or natural gas with a minimum geometric filling capacity of 100,000 m³;
- (i) Plants for the production of lead batteries with a minimum output of 500,000 starter batteries or industrial cells per year;
- (j) Plants for the extraction of vegetable fats or oils with a processing capacity in excess of 50,000 tons of oil-containing seed material per year;
- (k) Plants for the production of biological fuels with a production capacity in excess of 10,000 tons per year;
- (1) Plants for the production or refining of sugar with a minimum production capacity of 60,000 tons per year,

when pursuing the procedure under trade law, unless mining-law stipulations apply;

- —Deforestation on a surface in excess of 10 hectares, when pursuing the procedure under forestry law;
- —The construction of hotels, including their ancillary facilities, in excess of 500 beds or with a land need in excess of 5 hectares outside of existing close settlement systems, when pursuing the procedure under building law:
- —Permanent facilities for motor sports events, when pursuing the procedure under the law applicable to events.

Constructions, activities and technologies within the competence of the Ministry of the Environment of the Czech Republic

Agriculture and forestry

- -Deforestation of an area exceeding 5 hectares;
- —Amelioration activities (drainage, protection of soil from erosion, land alterations, technical forest amelioration) on an area exceeding 500 hectares;

Mining industry

- —Extraction and processing in situ of ore, magnesite, coal exceeding 100,000 tons per year, stone, gravel, bituminous shale and industrial minerals exceeding 200,000 tons per year, natural gas exceeding 100 million m³ per year, and peat;
- Extraction and processing of uranium ore, waste banks and sludge beds including recultivation;
- —Extraction and refining of crude oil, including plants for regeneration of used mineral oils, facilities for thermal and chemical processing of coal and shale;

Energy industry

- —Electric power plants, other industrial facilities for the production of electricity, steam, hot water, and other facilities with an installed output exceeding 100 MW₁;
- -Hydroelectric power plants with a peak output of 50 MW, and more;
- -Nuclear power plants and other facilities with nuclear reactors;
- -Facilities for the conversion, enrichment and production of nuclear fuel;
 - -Interim spent nuclear fuel storage facilities;
- —Processing and final depositing of highly radioactive waste;

- —Processing and depositing of low and medium radioactive waste from operating and shut-down nuclear power plants and from facilities using radionuclides;
- —Long-distance gas, oil, steam, hot water and other pipelines, including their facilities (pumping, exchange and compressor stations), long-distance power transmission lines (110 kV and more);
- —Underground storage of natural gas and other gases with a capacity exceeding 1 million m³, overground storage of natural gas and other gases with a capacity exceeding 100,000 m³, of oil, oil products and chemicals with a capacity exceeding 1,000 m³;

Metallurgy

- —Production and processing of crude iron, cast-iron and steel with a capacity exceeding 30,000 tons per year, production and processing of non-ferrous metal (non-ferrous metallurgy) with a capacity exceeding 3,000 tons per year;
- —Surface processing of metals with a capacity exceeding 10 million m² per year of processed surface;

Wood and paper industry

---Production of cellulose and paper;

Other industries

- —Processing of asbestos and asbestos products;
- -- Cement factories and lime factories with a capacity exceeding 100,000 tons per year;
- —Chemical production with a capacity exceeding 200 tons per year;
- —Production of toxic chemicals, pesticides and pharmaceutical products in an amount exceeding 1 ton per year;
- -Facilities for processing, neutralizing and incinerating hazardous waste in an amount of 1,000 tons per year and more, and facilities for storing and depositing hazardous waste in an amount of 10 tons and more;

Infrastructure

- —Construction of highways, first category roads, railways, airports, and permanent racing tracks for motor vehicles with hardened surface, waterways including ports;
- —Dams and water reservoirs, if the height of the dam exceeds a level of 10 m above the footing, or if the total volume exceeds 10 million m³;
- —Facilities for groundwater abstraction if the annual volume of abstracted water exceeds 10 million m³;
- -Facilities for municipal waste treatment with a capacity exceeding 100,000 tons per year.

Constructions, activities and technologies within the competence of the district offices of the Czech Republic

Agriculture and forestry

- —Facilities for animal production, including waste deposits, for cattle breeding facilities with a capacity exceeding 100 animals, for pig breeding facilities with a capacity exceeding 200 pigs, for poultry farms with a capacity exceeding 25,000 hens;
- —Storage facilities for agricultural products with a capacity exceeding 20,000 tons;
- —Amelioration activities (drainage, irrigation, protection of soil from erosion, land alterations and technical forest amelioration) on an area from 10 hectares up to 500 hectares;
- —Landscape interventions which may cause fundamental changes in the biological diversity and in the structure and function of ecosystems;

Food industry

- —Breweries, malting houses and non-alcoholic beverage production with a capacity exceeding 10,000 hl/year;
- —Slaughterhouses and meat-processing plants with a production capacity exceeding 5,000 tons per year;
- —Starch producing plants with a capacity exceeding 50,000 tons per year of processed potatoes;
- —Sugar refineries with a capacity exceeding 15,000 tons per year of processed raw materials;
- —Frozen food factories with a capacity exceeding 100,000 tons per year of frozen products;
- —Distilleries with a capacity exceeding 1,000 tons per year;
- —Oil industry (production of vegetable oil and grease) and production of detergents with a production capacity exceeding 20,000 tons per year;
- —Dairies and milk product facilities with a capacity exceeding 100,000 tons per year of processed milk;
- —Canning factories with a production capacity exceeding 100,000 tons per year;

Energy industry

- —Electric power plants, other industrial facilities for the production of electricity, steam, hot water and other facilities burning fossil fuel, with an installed output from 20 to 100 MW,;
- —Hydroelectric power plants with a peak output from 10 to 50 MW_e;

Metallurgy

- —Surface processing of metals with a capacity from 5 to 10 million m² per year of processed surface;
- —Machinery and electrotechnical production on a production area exceeding 5,000 m²;
- —Production and assembly of motor vehicles, railway carriages and tanks with a capacity exceeding 1,000 pcs/year;
- -Production of passenger and cargo ships for river transport;
- —Production and repair of airplanes with a capacity exceeding 100 pcs/year;

Wood and paper industry

- —Impregnation of wood with toxic chemicals in an amount exceeding 1,000 tons per year;
- -Production of fibreboard and plywood with a production capacity exceeding 50,000 m² per year;
- —Production of furniture, with a capacity exceeding 10,000 m³ of processed raw material per year;

Other industries

- —Processing of textiles, dye works, with a capacity exceeding 10,000 tons per year of used chemicals;
- ---Tanneries with a capacity exceeding 50,000 m² per year of processed raw material;
- —Production of glass or glass fibres with a capacity exceeding 50,000 tons per year;
- —Use and recycling of contaminated chlorinated hydrocarbons in an amount exceeding 10 tons per year;
- —Polygraphic facilities with a capacity exceeding 1 ton per year of used chemicals;
- —Storage of toxins and pesticides in an amount exceeding 1 ton per year, liquid fertilizers, pharmaceutical products, paints and lacquers in an amount exceeding 100 tons per year;
- —Production of construction materials with a capacity exceeding 100,000 tons per year;
 - —Asphalt production exceeding 10,000 tons per year;

Infrastructure

- —Facilities for water abstraction of an annual volume of abstracted water exceeding 3 million m³;
- —Waste-water treatment plants and sewage with a capacity exceeding 100,000 inhabitant equivalents;
- —Sludge basins and sludge beds with a capacity exceeding 100,000 m³, and others with an embankment height over 10 m above the footing;
- -Facilities for municipal waste treatment with a capacity from 10,000 to 100,000 tons per year;

-Rendering plants and veterinary decontamination plants; -Modifications of watercourses that fundamentally change the character of the watercourse and the nature of the landscape; —Cableways, part of which is the construction of ski pistes of a total area exceeding 5 hectares; -Trade and storage complexes of a total built-on area exceeding 3,000 m²; -Camp sites, sports and military shooting ranges affecting interests protected by separate regulations; -Airports and permanent racing tracks for motor vehicles without hardened surface. List of proposed activities subject to environmental impact assessment in Estonia -Nuclear industry; -Industry using radioactive materials and related fields of activity; —Biochemistry, biotechnology and pharmaceutics; —Chemical industry; -Production and use of mutagenic substances, including carcinogenic substances; -Power production and technological (engineering) networks: -Research activities where pathogenic microbes, electromagnetic radiation of high capacity, radioactive and other environmentally hazardous substances are used; --Production, storage, and use of mineral and organic fertilizers, pesticides and poisonous chemicals within areas with environmental protection restrictions; -Production using natural resources, including production of cement, glass and cellulose; -Mining and processing of mineral resources; -Processing of agricultural products; -Animal husbandry facilities for more than 10 cows or 30 pigs, and other cattle sheds and poultry farms with pollution loads equivalent to the former; -Waste treatment;

-Storage, transport, and treatment of hazardous

-Storage sites of oil products (with volume over

—Activities causing noise, vibration, and electromagnetic fields, including high-capacity transmission lines;

5 m³), workshops providing technical services;

waste:

- -Microelectronics industry;
- —Activities causing soil erosion and deflation or changes in the coastline of water-bodies;
- -Regulation of flow on natural water-bodies, and amelioration;
 - -Fish-rearing at natural water-bodies;
- —Utilization of forests and other renewable natural resources:
- -Activities changing landscape, and recultivation activities:
 - -Activities changing the land use;
 - -Planning concerning resorts and recreation areas;
- —Changing of sanitary conditions within recreation areas, and of natural conditions within nature conservation areas.

List of proposed activities subject to national environmental impact assessment in Estonia

- —National and sectorial concepts, programmes, and planning related to the utilization of natural resources, including use of the land fund, management programmes for water, forests and other renewable natural resources, waste management;
- —Master plans and regional development plans, and reallocation of productive forces on the national level;
 - -Master plans of regions and administrative units;
- —Plans of industrial regions and traffic schemes of towns;
- -Establishment and zoning of nature conservation areas;
- —Establishment of communication lines and production facilities, planning of settlements, changing the purpose (type) of land use, extraction of mineral resources;
- —Selection of location and route and design projects of national networks (gas, communications, power transmission lines with capacity of 110 kW and more), railways, roads, airports and ports;
- —Dredging and dumping at sea, in the Peipsi and Pihkva lakes, as well as at other water-bodies within the national jurisdiction;
- —Terminals of oil products with a capacity of 5,000 m³ and more;
- Projects concerning regulation of waterways and water-bodies of national and regional importance;
- —Projects concerning treatment and storage sites of hazardous waste, including radioactive waste;
- —International and interregional schemes of nature management and conservation;

- -Electric power plants with a capacity exceeding 50 MW, and nuclear power plants; -Projects for the establishment, reconstruction and dismantling and new technological schemes of enterprises using natural resources on a large scale, or producing environmentally hazardous waste; -Projects concerning the use and extraction of min-
- eral resources of national importance;
- -Groundwater intake structures in groundwater layers of national importance;
- -Projects of waste treatment and experimental waste-water treatment facilities;
- -Plans for the remediation of the consequences of large-scale accidents;
- -Projects connected with changing the gene-fund of livestock.

List of projects requiring EIA in Finland

Projects to which the EIA procedure shall be applied under section 4, paragraph 1, of the Act on Environmental Impact Assessment Procedure are:

- —Crude oil refineries and installations for the gasification and liquefaction of bituminous shale, coal or peat, with an output of at least 500 tons per day;
- -Boiler and power plants with a gross output in excess of 300 MW;
- -Foundries or smelting plants with an output of at least 5,000 tons per annum, and iron and steel works, sintering plants and iron alloy manufacturing plants, and metal works or calcining plants processing metals other than iron:
- -Asbestos extraction and installations for the processing and transformation of asbestos or products containing asbestos;
- —Factories manufacturing artificial fibres, mineral wool and cement, and plants using solvents or substances containing solvents and using at least 1,000 tons of solvent per annum, and plants manufacturing on a large scale the chemicals dangerous to health and the environment referred to in section 32 of the Chemicals Act (744/89);
- -Incineration plants for the disposal of hazardous waste, physico-chemical treatment plants and landfills, household waste incineration plants, and landfills dimensigned for a waste volume of at least 20,000 tonnes per annum:
 - —Pulp, paper or board mills;
- Large-scale extraction, dressing and processing of metal ores and other mined minerals;
- -Stores for oil, petrochemical products and chemical products when the total volume of the storage tanks for these substances is over 50,000 m³;

- The construction of motorways, express roads, long-distance railway tracks, and airports if the main runway is at least 2,100 m long;
- -Main pipelines intended for the long-distance transport of oil and liquids other than water or waste water. main pipelines with a diameter of at least 1,000 DIN intended for the long-distance transport of gas, and power lines of at least 400 kV;
- -Maritime channels for ships with a draught of at least 8 metres, inland waterways for ships with a draught of at least 4 metres, ports with an access channel of at least the above depths, and significant canals;
- -Sewage treatment plants dimensioned for over 100,000 people;
- -Dams as referred to in section 9, paragraph 2, of the Dam Safety Act (413/84), reservoirs over 10 km² in size and water body regulation projects, if the mean flow in the water body is over 20 m³/s and the flow and water level conditions will change materially compared with the initial situation:
- -Groundwater abstraction, if the annual volume is at least 3 million m³;
 - —Production of hydrocarbon at sea;
- -Permanent alteration to natural forest, peatland or wetland over what can be considered a unified area above 200 ha in size, by carrying out new ditching or by draining unditched peatland and wetland areas, by removing the tree stock permanently or by replanting the area with species of trees not indigenous to Finland; and
- -Nuclear power plants and other nuclear reactors, with the exception of research reactors, with a maximum continuous heat output below 1 MW, and plants designed mainly to produce or enrich nuclear fuels, to reprocess irradiated nuclear fuels, or process, permanently store and dispose of radioactive waste derived from the production of nuclear energy.

List of projects requiring notification in Norway

- Hydropower developments generating over 40 GWh per year, or which will increase the power generated from a watercourse by at least 9,000 h.p.;
- -Construction of power lines with voltages of 132 KV or more, and over 20 km in length;
- -Construction of oil and gas pipeline systems involving pipelines with pressures above 4 bar;
- -Construction of thermal power stations and combined power and heating stations of over 10 MW;
- -Road or railway construction requiring investments of more than NKr 200 million over a period of eight years or less;
- -Construction or significant extension of airports and buildings and installations at existing airports as steps towards significant changes in airport functions;

- —Designation of large military ranges or training grounds, or significant changes in the uses of such areas;
- —Erection, extension or significantly altered use of buildings and installations, if the project requires investments of more than NKr 250 million. Extensions carried out within three years of the completion of the first phase of building are considered part of that phase;
- —Cutting or extension of workings for ore, minerals, rock, gravel, sand, clay or other deposits for sale, industrial use or the like if the total surface affected is at least $50,000 \, \text{m}^2$ or if the total volume removed exceeds $500,000 \, \text{m}^2$;
- —Cultivation over a period of five years or less of over 300,000 m² of continuous new land, or of smaller areas totalling over 300,000 m² and so close together as to give the project an impact of the same order as if they were continuous;
- —Afforestation over a period of five years or less of continuous areas of over 2,000,000 m², or of smaller areas totalling over 2,000,000 m² and so close together as to give the project an impact of the same order as if they were continuous;
- —Establishment or extension of particularly large fish farming installations;
- Large-scale building or construction work to establish or extend harbour facilities;
- -Large plants for the disposal and destruction of special waste.

List of environmentally hazardous installations and other types of activities that require ecological expertise, including EIA, in the Russian Federation

- —Installations of the nuclear fuel cycle: plants designed for the production or enrichment of nuclear fuels, for the processing of irradiated nuclear fuels or the storage, disposal and processing of radioactive waste, fuel elements, and nuclear ammunition and reactors.
- —Fuel/energy installations: nuclear, hydroelectric and thermal power stations and large fuel-combustion plants with an output of 300 MW or more.
- —Ferrous and non-ferrous metallurgy: installations for the initial smelting of cast-iron and steel and for the production of ferrous and non-ferrous metals; machine-building and metal-processing enterprises excluding undertakings without foundries or those without chemical ore-dressing shops.
- —The petrochemical and oil and gas processing industry, excluding undertakings manufacturing lubricants from crude oil, and installations for the production of liquefied gas from coal and bituminous shales with a daily output of 500 tons or more.
- In accordance with the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991).

- —Chemical industry: chemical works for the extraction, production and processing of asbestos and products containing asbestos (for asbestos-cement products, with an annual output of more than 20,000 tons; for friction material, with an annual output of more than 30 tons finished product; for other products, in amounts exceeding 200 tons/year), glass, mineral fertilizers, pesticides and other toxic chemicals.
- —Coking by-products industry; plants for the thermal processing of solid fuels.
- -Extraction and processing of all types of useful minerals, including oil and gas.
- —Pulp and paper industry: production of mechanical pulp, chemical pulp, semi-chemical pulp, paper and cardboard with a daily output of 200 tons or more.
- —Light industry: factories for the cleaning, washing and bleaching of wool; tanneries; dyeing factories and other enterprises, excluding factories for the manufacture of yarns and fabrics from cotton, linen and wool without dyeing or bleaching shops, footwear, silks, knitted fabrics and lace, and garment factories.
- —Building industry: enterprises using hydromechanical extraction of sand and gravel materials; cement and lime works.
- -Microbiological industry; antibiotics manufacturing plants.
- -Oil, gas and oil-product pipelines with a diameter of over 300 mm.
- —Depots for the storage of oil products (total capacity of more than 5,000 cubic meters), petrochemical and chemical products, toxic chemicals, mineral fertilizers (capacity 5,000 tons or more), pesticides (capacity 850 tons or more), above-ground storage of natural gas, underground storage of fuel gases.
- —Production, storage, transport and destruction of ammunition, explosives and missile fuel.
- —Trunk motorways; main, secondary or regional (local) roads; airports with a runway length of 1,500 metres or more.
- —Commercial seaports and inland waterways and ports accepting vessels with a freight-carrying capacity of 1,350 tons or more.
- -Long-distance railways, stations and wagon cleaning and washing points.
- —Livestock breeding farms: pig farms (50,000 head or more), farms for fattening young bovines (6,000 head or more), bovine breeding farms (1,200 cows or more), poultry farms (400,000 layers or more, 3 million broilers or more).
- —Land reclamation projects covering an area of over 1,000 hectares; main canals.
- —Water-supply systems for large cities (surface water abstraction facilities with an output of more than 1 cubic metre/second and groundwater abstraction facilities and collectors in cases where the volume of water to be abstracted amounts to 10 million cubic metres or more).

—Large dams (over 15 m high) and reservoirs. -Factories producing pulp and paper (installations producing pulp and cardboards, cartons, etc. by using -Installations and facilities for thermal and chemical cellulose plants and waste paper). processing, utilization and storage of non-radioactive (industrial, agricultural, etc.) wastes. -Installations designed for extracting asbestos and processing and converting asbestos and products con--Municipal sanitation installations and constructaining asbestos. tions: refuse incineration and refuse processing plants, -Major infrastructure activities: organic waste storage (including cattle burial sites), domestic solid waste dumps (district/regional). (i) Motorways, highways, express roads and connected bridges and tunnels; Deforestation of large areas (in connection with the construction of hydraulic-engineering and other indus-(ii) Intercity railway lines and connected bridges trial facilities). and tunnels: (iii) Airports; —Space-vehicle launching sites. (iv) Ports (which permit the entry of vessels over Note: A full environmental impact assessment is car-1,350 tons); ried out for all installations located in areas of ecological disasters or ecological emergencies. (v) Energy transmission lines with a voltage of 154 kV or more; (vi) Dams (with a lake area over 15 square kilo-List of activities subject to EIA in Turkey metres or with a lake volume over 100 million cubic metres). -Refineries, gasification and liquefaction installa--Mass housing projects (over 1,000 dwellings) and tions: Olympic villages. (i) Crude oil refineries (excluding installations -Major land reclamation from the sea and dredging. producing lubrication material from crude oil): -Waste discharge installations related to the incineration, chemical treatment, storage or landfill of toxic (ii) Installations where 500 tons/day or more of and hazardous wastes. coal or bituminous schist are gasified or liquefied. —Oil and gas pipelines and storage facilities. —Thermal and nuclear power plants: -Ship dismantling docks. (i) Thermal power plants with a total heat output -Installations where cast-iron and steel are smelted of 300 MW or more and other combustion and non-ferrous materials are produced. installations: —Cement factories. (ii) Nuclear power plants and other nuclear reactors (excluding research installations) with —Fertilizer factories. a maximum power not exceeding 1 kW continuous thermal load and involved in the -Sugar factories. production and conversion of fissionable —Aircraft manufacturing and repair installations. materials. -Manufacturing and assembling of railway equip--Radioactive waste installations (installations dement, wagons and all kinds of railway vehicles. signed for the storage, disposal and processing of radioactive wastes). -Manufacturing and assembling of motor vehicles. —Integrated chemical plants: —Specialized industrial zones. (i) Petrochemical plants; -Slaughterhouses and meat by-products processing installations and integrated meat plants (with a capacity (ii) Installations producing hazardous and toxic of over 2,000 tons/year live weight). chemical matters; Abstraction of groundwater with a volume capacity (iii) Explosives industry; of 10 million cubic metres or more per year. (iv) Production of pesticides and pharmaceutical —Off-shore hydrocarbon production. materials:

(v) Factories manufacturing accumulators and

(vi) Large storage facilities for petrochemicals

batteries;

and chemical products.

-Off-shore oil extraction.

tion).

—Extraction and enrichment of all kinds of minerals (those with a metal content or used for energy produc-

- —Installations for the reprocessing of radiated nuclear fuels.
 - -Tobacco factories.
- —Tanneries and installations for the processing of leather (using motor power over 50 h.p.).
 - —Rubber factories.
- —Stone and soil industry (ceramics, porcelain, brick, tile and glass factories).

List of projects which do not require EIA in Ukraine

- —Works which have an obvious nature-conservation purpose and are planned separately from industrial plants;
- —All types of effluent purification plants for all types of waste water: household, industrial, surface, drainage, mine, etc.;
- —Sewer systems and related installations for the transport of waste water;
- —Water-supply systems (with recycling of waste water, after appropriate purification and processing, for industrial water-supply purposes), recirculating systems of industrial water-supply and water re-use systems;
- —All types of gas and dust-scrubbing and entrapment installations and appliances;
- —Measures to eliminate adverse effects of economic activities on the natural environment;
- —Reconstruction and technical re-equipment of existing plants and other facilities not involving any increase in their harmful environmental effects;
- —In cases where EIA materials are not prepared, an "environmental protection" chapter is compiled as part of the documentation.

List of projects which require EIA in Ukraine

- —Installations of the energy industry (nuclear, thermal and hydroelectric power stations, fuel-burning plants);
- —Metallurgical plants (iron and steel, non-ferrous metals, newly equipped facilities);
- —Chemical and petrochemical plants, including storage and dumps (newly equipped, reconstructed and enlarged);
- —Plant for the extraction of ores and non-metallic minerals (oil and gas extraction, preparation plants);
- —Sites for the burial and processing of wastes (solid, household, industrial, toxic or radioactive);
 - —Pipelines for the transport of oil, gas or ammonia;

- -Large dumps of acids, toxic chemicals and other toxic substances:
- —Construction of long-haul transboundary main-line railways and motorways;
- -Large water reservoirs and water management systems;
 - —Processing or enrichment of nuclear fuel;
- —Catchments for the surface water and groundwater of towns, settlements and industrial estates;
- -Works located in nature reserves, spas and other protected areas.

List of projects for which EIA is mandatory in the United Kingdom

- —Crude-oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 tons or more of coal or bituminous shale per day;
- —Thermal power stations and other combustion installations with a heat output of 300 MW or more and nuclear power stations and other nuclear reactors (except research installations for the production and conversion of fissionable and fertile materials whose maximum power does not exceed 1 kW continuous thermal load);
- —Installations solely designed for the permanent storage or final disposal of radioactive waste;
- —Integrated works for the initial melting of cast-iron and steel:
- —Installations for the extraction of asbestos and for the processing and transformation of asbestos and products containing asbestos: for asbestos-cement products, with an annual production of more than 20,000 tons of finished products; for friction material, with an annual production of more than 50 tons of finished products; and for other uses of asbestos, with a utilization of more than 200 tons per year;
 - -Integrated chemical installations;
- —Construction of motorways, express roads, privately financed toll roads, lines for long-distance railway traffic and airports with a basic runway of 2,100 m or longer;
- —Trading ports and also inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1,350 tons;
- —Waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes.

In addition to these, a further 86 categories of projects require EIA where they are likely to have significant environmental effects.

Annex II

TRANSBOUNDARY EIA EXPERIENCES IN THE NETHERLANDS

(i) Salt water discharge in the Eems estuary

Proponent: Gasunie

Competent authority: Minister for Transport and Public Works

28 February 1989: The Minister for Housing, Physical Planning and Environment of the Netherlands sent the EIS as well as the "notice of intent", the project-specific guidelines and the review report of the EIA Commission to the Federal Minister for the Environment, Nature Conservation and Nuclear Safety of Germany. The summary of the EIS was translated into German.

- 31 August 1989: The German Federal Minister asked for the licensing to be postponed and suggested setting up an expert group. This request was met.
- 7 November 1989: The Minister of the Netherlands asked for comment on the EIS, which the German Federal Minister sent by letter, dated 6 December 1989.

The proponent decided not to proceed with the EIA and the decision-making procedure for internal reasons, and consequently the activity was not started.

(ii) Extension of the Eems Power Station (Eemscentrale)

Proponent: Electriciteits Productiemaatschappij Oost en Noord Nederland (EPON)

Competent Authority: Provincial Government Groningen

The competent authority in the Netherlands announced the start of the EIA process in the border area in German newspapers. In reaction to these announcements, comments were sent to this authority by several German local authorities.

15 May 1990: The Minister for Housing, Physical Planning and Environment of the Netherlands sent the notice of intent and the project-specific guidelines to the Federal Minister for the Environment, Nature Conservation and Nuclear Safety of Germany.

28 March 1991: The Minister of the Netherlands sent the EIS to the German Federal Minister. The summary of the EIS was translated into German. At the same time the Provincial Government of Groningen informed the German local authorities and the public.

Many German local authorities sent their comments to the Provincial Government of Groningen. The German Federal Government needed extra time to draw up its comments. This was granted by the authorities in the Netherlands.

Early 1992: The final decision on the proposed activity was taken, allowing the extension of the Eems Power Station.

(iii) Extension Aluminium Delfzijl

Proponent: Aluminium Delfzijl

Competent authority: Provincial Government Groningen and Directorate-General for Public Works

The German authorities and the public were informed of the start of the EIA at an early stage.

20 August 1990: The Minister for Housing, Physical Planning and Environment of the Netherlands sent the notice of intent and the project-specific guidelines to the Federal Minister for the Environment, Nature Conservation and Nuclear Safety of Germany.

June 1992: The proponent decided to delay the extension for one to three years for financial reasons.

(iv) Waste Disposal Plan Limburg

Proponent: Provincial Government Limburg

Competent authority: Provincial Government Limburg

The competent authority publicized the start of the EIA process in Germany with an announcement in German newspapers and by sending the notice of intent. The German authorities and the public were given opportunities to have a say in the project-specific guidelines.

22 August 1991: The Minister for Housing, Physical Planning and Environment of the Netherlands sent the notice of intent as well as a copy of the letter from the Provincial Government of Limburg to the German local authorities and the announcement to the Federal Minister for the Environment, Nature Conservation and Nuclear Safety of Germany.

The EIA documentation has been prepared and transmitted to the German authorities. A public hearing, also in Germany, was held in autumn 1993.

(v) Gas pipeline Waddensea

Proponent: Statoil

Competent authority: Minister of Economic Affairs The proponent, Statoil, envisaged to work out a suitable track for a gas pipeline from Norway to the Netherlands or to Germany. In both Germany and the Netherlands, an EIA procedure for the necessary licences is obligatory for this type of proposed activity. Statoil started an EIA procedure in the Netherlands.

22 August 1990: The Minister for Housing, Physical Planning and Environment of the Netherlands sent the notice of intent as well as the project-specific guidelines to the Federal Minister for the Environment, Nature Conservation and Nuclear Safety of Germany.

One of the alternatives concerned a track through the part of the Waddensea belonging to Germany (Land of Lower-Saxony); for this track a German EIA procedure was started. As this German alternative was for the proponent the most promising one, the EIA procedure in the Netherlands, which was almost completed, was suspended. The German local authorities informed the Provincial Government of Groningen and involved the Netherlands authorities in the scoping process (Antragskonferenz).

The EIA process in Germany is almost completed. The first licences in physical planning have already been given to Statoil.

(vi) Waterinjection South East Drenthe

Proponent: Dutch Oil Company NAM

Competent authority: Minister of Economic Affairs

14 February 1991: The Minister for Housing, Physical Planning and Environment of the Netherlands sent the notice of intent and the project-specific guidelines to the Federal Minister for the Environment, Nature Conservation and Nuclear Safety of Germany.

20 January 1992: The Minister of the Netherlands sent the EIS to the German Federal Minister for comment, with a request to indicate if a consultation was deemed necessary.

At the same time the competent authority informed the German local authorities.

12 May 1992: The German Federal Minister informed his colleague in the Netherlands that no consultation was necessary according to the German local authorities.

No final decision on the activity has been taken so far.

(vii) Extension of Maastricht airport

Proponent: Maastricht airport

Competent authority: Minister of Transport and Public Works and the Minister for Housing, Physical Planning and Environment

24 April 1991: The Minister for Housing, Physical Planning and Environment of the Netherlands sent the EIS and several additional study reports to the Federal Minister for the Environment, Nature Conservation and Nuclear Safety of Germany as well as to the Belgian Federal Minister for the Environment and the Ministers responsible for the Environment in the regions of Flanders and Wallonia for comment, with a request to indicate if a consultation was necessary. An initial version of the EIS had previously been published in the neighbouring countries and hearings were organized. As a result of the comments made on the initial version, a revised EIS was prepared.

The Belgian Ministers requested more time to comment. The German Federal Minister asked for a consultation. This consultation took place on 8 November 1991 in Maastricht under the chairmanship of the Environment Ministry of the Netherlands. It was a technical meeting during which methods used for noise prediction were explained.

No final decision on the activity has been taken so far.

(viii) Extraction of lignite Garzweiler

The Government of the Netherlands was formally informed of an EIA taking place for the "Garzweiler" project, a lignite extraction project in Germany. The Minister for Housing, Physical Planning and Environment of the Netherlands was informed by the German Federal Minister for the Environment, Nature Conservation and Nuclear Safety and by the Environment Minister of Northrhine-Westphalia that in the case of Garzweiler the provisions of the Espoo Convention would be applied as much as possible.

Annex III

CENTRES OF EXPERTISE ON EIA

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NATIONAL INSTITUTIONS DEALING WITH ENVIRONMENTAL IMPACT ASSESSMENT

Albania

In Albania, the national centre on EIA is the Committee of Environmental Protection, which has set up a board of advisers from various institutions. The experience of the country in EIA is insufficient. Thus, the need for training Albanian specialists is considered to be urgent. In this context a two-day training course was set up in May 1993 on the establishment of EIA systems, to improve the capacity of EIA specialists.

Austria

Federal Environmental Agency Spittelauer Lände 5 A-1090 Vienna Telephone: (43-1) 31 304-0

Fax: (43-1) 31 304-400

Austrian Research Centre Seibersdorf A-2444 Seibersdorf Telephone: (43-2254) 80 3800

Belgium

At the federal level:

Ministerie Volksgezondheid en Leefmilieu Dienst Bescherming van de Bevolking tegen Ioniserende Stralingen (DBIS) Pachecolaan 19 bus 5 1010 Brussels

Telephone: (32-2) 210.49.77

In the region of Flanders:

Ministerie van de Vlaamse Gemeenschap AMINAL Afdeling Algemeen Milieu- en Natuurbeleid Cel Mer Belliardstraat 14-18 1040 Brussels Telephone: (32-2) 507.67.23 Fax: (32-2) 507.67.25

In the region of Wallonia:

Ministère de la Région Wallonne Direction Générale des Ressources Naturelles et de l'Environnement Division de la Prévention des Pollutions et de la Gestion du Sous-sol

Avenue Prince de Liège 15 5100 Namur (Jambes) Telephone: (32-81) 32.59.24 Fax: (32-81) 32.59.82

In the Brussels region:

Brussels Instituut voor Milieubeheer (BIM) Gulledelle 100

1200 Brussels

Telephone: (32-2) 775.75.11 Fax: (32-2) 775.76.11

Croatia

EKONERG

Institute for Energy and Environmental Protection Avenya Vukovar 37 Zagreb

Regional Activity Centre for Priority Actions Programme (Mediterranean Action Plan/UNEP)
Kraj SV. Ivana 11

58000 Split

Czech Republic

Czech Ecological Institute Division of Environmental Impact Assessment Udernická 1931/1 14800 Prague 4 Telephone: (42-2) 7936682

Telephone: (42-2) 7936682 Fax: (42-2) 7936648

Denmark

Department of Environment Technology and Social Studies Roskilde University P.O. Box 260 DK-4000 Roskilde Telephone: (45) 46757711

Fax: (45) 46754403

Finland

The Finnish Environment Agency P.O. Box 140 00251 Helsinki

Telephone: (358-0) 403000 Fax: (358-0) 40300190

Netherlands

Environmental Impact Assessment Commission Postbox 2345 3500 GH Utrecht Telephone: (31-30) 347666 Fax: (31-30) 331295

Norway

National Centre on EIA
Norwegian Institute of Urban and Regional Research
P.O. Box 44 Blindern
0313 Oslo
Telephone (47, 22) 058800

Telephone: (47-22) 958800 Fax: (47-22) 607774

Republic of Moldova

National Institute of Ecology State Department for Environmental Protection 73 Stefan cel Mare Avenue 277001 Chisinau

Telephone: (373-2) 22 61 61 Fax: (373-2) 23 38 06

Slovakia

Centre on EIA
Department of Landscape Ecology
Faculty of Natural Sciences
Comenius University
Mlynska dolina B-2
84215 Bratislava
Telephone: (42-7) 720462

Fax: (42-7) 729064

Sweden

In Sweden, the Environmental Protection Agency, the National Board of Housing and Building and the National Board of Antiquities participate in the development of EIA in their respective field of expertise.

Turkey

Ministry of Environment (çevre Bakanligi) CED ve Planlama Genel Müdürlügü Eskisehir Yolu 8 km ANKARA

Ukraine

The Ministry for Environmental Protection of *Ukraine* has prepared a list of relevant scientific organizations having theoretical and practical EIA experience:

- —The Ukrainian Scientific Centre for the Protection of Waters (ul. Bakulina 6, 210888 Kharkov);
- —The Ukrainian Scientific Centre for Marine Ecology (Frantsuzky) (Bulvar 89, 270009 Odessa 9).

These scientific organizations are recommended by the Ministry for the preparation of EIA information.

United Kingdom

EIA Centre Department of Planning and Landscape University of Manchester Manchester M13 9PL

Department of Biological Sciences University College of Wales Aberystwyth Dyfed SY23 3DA

Centre for Environmental Management and Planning AURIS Business Centre 23 St. Machar Drive Old Aberdeen Aberdeen AB2 1RY

Impacts Assessment Unit Brookes University Oxford OX3 OBP

Part Two

LEGAL AND ADMINISTRATIVE ASPECTS OF THE PRACTICAL APPLICATION OF RELEVANT PROVISIONS OF THE CONVENTION ON ENVIRONMENTAL IMPACT ASSESSMENT IN A TRANSBOUNDARY CONTEXT

INTRODUCTION

In accordance with a decision by the Senior Advisers on Environmental and Water Problems at their fifth session, a task force, with Germany as lead country, was set up to prepare a report on ways and means of developing and further strengthening the legal and administrative measures for the practical application of the provisions of the Convention on Environmental Impact Assessment in a Transboundary Context. Experts from Albania, Austria, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Finland, Germany, Greece, Italy, the Netherlands, Norway, Poland, Romania, the Russian Federation, Slovakia, Spain, the United Kingdom and the European Community (EC) participated in the task force. The task force met four times: in Geneva (Switzerland) from 13 to 15 July 1992, in Berlin (Germany) from 7 to 9 September 1992, in Maastricht (Netherlands) from 24 to 27 May 1993, and in Freiburg (Germany) from 10 to 12 August 1993. Its interim report was submitted to the Signatories at their second meeting in December 1992 (ENVWA/ WG.3/R.6). On the basis of a survey of the text of the Convention and existing experience, the task force identified a number of items requiring further clarification. These related either to clauses with a very general meaning (e.g. "reasonable time") or to situations which were not explicitly mentioned in the Convention (e.g. public hearings). Although the task force was aware that methodological aspects (such as clearer identification of proposed activities and significance of transboundary impact) could have legal consequences, it did not discuss these issues as they were dealt with in detail within another activity under the implementation of the Convention pending its entry into force (see part three of this publication). For reasons of time, the task force concentrated its discussions on:

- (a) Provisions on time-limits for notification and submission of information;
- (b) The content of the notification under Article 3, paragraph 2, of the Convention;
- (c) Responsibility for the procedural steps that aim at participation of the public of the affected Party in the EIA procedures of the Party of origin;

(d) Responsibility for translations and the cost of translations.

This part of the publication describes possible ways and means of dealing with the above issues so as to facilitate the practical application of the Convention. Matters of more general interest have been addressed. Problems related to exceptional cases have been given specific consideration. Nevertheless, bilateral or multilateral agreements or other arrangements containing detailed provisions on the issues in question could also facilitate the practical application of the Convention.

I. PROVISIONS ON TIME-LIMITS FOR NOTIFICATION AND SUBMISSION OF INFORMATION

The Convention provides in Articles 3 and 4 for a series of procedural steps by which the Party of origin notifies any Party which it considers may be an affected Party about a proposed activity, obtains information about the potential transboundary environmental impact of the proposed activity and submits the EIA documentation. The concerned Parties also have to arrange for public participation. Each of these steps needs to be taken within an appropriate time-scale.

A. Notification in accordance with Article 3, paragraph 1, of the Convention

Article 3, paragraph 1, provides that the Party of origin shall, for a proposed activity listed in Appendix I that is likely to cause a significant transboundary impact, notify any Party which it considers may be an affected Party "as early as possible and no later than when informing its own public about that proposed activity". The purpose of the notification under Article 3, paragraph 1, is to alert the affected Party at the earliest possible stage to the fact that an activity which is likely to cause a significant adverse transboundary impact is proposed, and to give the affected Party the opportunity of indicating (under Art. 3, para. 3) whether it wishes to participate in the EIA procedure.

The earlier it is given, the more useful the notification will be. The timing of the notification depends also on the moment that the authorities in the Party of origin become aware of the proposed project. The application of this provision may therefore vary according to the procedural system in the Party of origin, depending especially on whether there is a scoping procedure. Basically, three different types of procedures can be distinguished:

- (a) Procedures including a formal scoping procedure with mandatory public participation;
- (b) Procedures including a formal scoping procedure without mandatory public participation; and
 - (c) Procedures without a formal scoping procedure.

The wording of Article 3, paragraph 1, of the Convention should, in principle, pose no problem for countries that have introduced a national scoping procedure as part of the EIA procedure which includes the mandatory participation of the public. These countries will have to notify affected countries no later than when informing their own public in the scoping procedure.

For other countries the situation is less clear. If they have introduced a scoping procedure without public participation, there will be an opportunity, following a notification under Article 3, paragraph 1, for the affected Party to make comments to assist in the scoping procedure. It will generally be beneficial for the Party of origin to involve the affected Party in that procedure in order to clarify the issues to be studied. Therefore, Parties of origin that have a scoping procedure without public participation should notify an affected Party during that scoping procedure.

In countries where no formal scoping procedure is required, it may not always be possible to notify an affected Party at the time that is most expedient for the purposes of Article 3. In these countries proponents of activities are not required to inform the authorities about their plans before preparing the EIA information required under domestic provisions. If no scoping procedure exists, the Party of origin should notify any Party that it deems an affected Party as soon as the authorities of the Party of origin are informed about the proposed activity and before the EIA documentation is completed.

A Party of origin may discover that a proposed activity is likely to cause a significant adverse transboundary impact only after informing its own public. In such situations, which are contrary to the provisions included in Article 3, paragraph 1, of the Convention, the Party of origin should notify the affected Party immediately. Furthermore, the Party of origin should recognize that its EIA procedure may be delayed to accommodate the interests of the affected Party pursuant to the provisions and time-frames of the Convention.

The issues dealt with here are also related to such questions as which Party is responsible for informing the affected Party's public, and how this public is to be informed about the activity and its potential environmental impact. These matters will be considered separately in chapters III, IV and V below.

B. Time-frame for responses in accordance with Article 3, paragraph 3, of the Convention

Article 3, paragraph 3, of the Convention requires the affected Party to respond to the Party of origin "within the time specified in the notification", and to indicate whether or not it intends to participate in the EIA procedure. The length of this time is not left entirely to the discretion of the Party of origin; in accordance with Article 3, paragraph 2, it must be "reasonable".

One of the criteria for whether a period is "reasonable" is stated in the Convention: the Party of origin shall take the nature of the proposed activity into account (Art. 3, para. 2 (c)). Another important consideration in this context is the extent to which it is necessary for the affected Party to contact specific authorities within its jurisdiction, or experts, before it can decide whether or not to participate in the EIA procedure. On the other hand, it is desirable to avoid unnecessary delays in the EIA procedure in the Party of origin. The time specified by the Party of origin should always be sufficient to allow the affected Party to take an informed decision. A time of one to four months would seem reasonable.

C. Time-frame for the transmittal of information in accordance with Article 3, paragraph 6, of the Convention

Article 3, paragraph 6, of the Convention provides that an "affected Party shall, at the request of the Party of origin, provide the latter with reasonably obtainable information relating to the potentially affected environment under the jurisdiction of the affected Party...". The purpose of this provision is to help the Party of origin to prepare the EIA documentation. The information shall be furnished "promptly".

The definition of the term "promptly" in this context depends on many individual aspects of the proposed activity in question; so it is difficult to specify how much time the affected Party has to transmit the information. However, a number of criteria can be given on which this specification should be based. These include the nature, size and location of the proposed activity; the extent of the area in question; the environmental status of this area; existing information systems; the type and state of the licensing process for the activity; information access and ways and means of information transmittal, etc. Article 3, paragraph 6, does not require the affected Party to carry out lengthy research, but only to provide the Party of origin with "reasonably obtainable information".

Due to the fact that all these criteria are to be considered, it is suggested that it should be left to the concerned Parties in each case to specify the meaning of the term "promptly". However, in general, a period of up to four months might be sufficient.

Where the affected Party considers that the reasonably obtainable information relating to the affected environment is insufficient for the purposes of the prepara-

tion of the EIA documentation, the Party of origin should allow the affected Party to specify either:

- (a) The additional time that the affected Party will require to obtain this information; or
- (b) Which additional information is required, so that the Party of origin may obtain it.

D. Time-frame for comments under Article 4, paragraph 2, of the Convention

Article 4, paragraph 2, of the Convention requires the concerned Parties to arrange for the distribution of the EIA 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 "within a reasonable time before the final decision is taken on the proposed activity". It seems difficult to specify the length of time that is "reasonable" in this context. The provisions aim at:

- (a) Ensuring that the time granted to the authorities and the public of the affected Party is adequate for their comments; and
- (b) Allowing the Party of origin sufficient time to consider these comments before it takes its decision on the activity.

There seems to be almost no experience related to the length of time granted to the authorities and the public in affected countries to prepare their comments. Where the public of affected countries has been given an opportunity to participate in EIA procedures in a country of origin, the time allowed for comments was the same as that for the public of the country of origin.

Basically, the authorities and the public in the affected Party should be granted the same length of time for their comments as the authorities and the public in the Party of origin. However, in the case of comments from the authorities and the public in the affected Party, additional time may be needed for the translation of the EIA documentation and for the translation and transmittal of comments to the competent authority of the Party of origin. The time required for these administrative tasks should not be included in the period allowed for comments, but should be added to it. Thus, if the authorities and the public in the Party of origin have a month to comment on the EIA documentation, the authorities and the public in the affected Party should also be given a month for their comments; the time for translation and transmittal should be counted separately.

In any case, it seems advisable that, when applying the Convention, a clearly defined time-frame for comments should be set, based on the time-frame of the EIA and the decision-making process in the Party of origin. This limit should be adequate, i.e. long enough, for:

(a) The translation of the EIA documentation (if the documentation is not translated before transmittal to the affected Party);

- (b) The examination of this documentation by the authorities and the public of the affected Party;
- (c) The formulation of comments by the authorities and the public;
 - (d) The translation of the comments;
- (e) The transmittal of these comments to the competent authority of the Party of origin.

Therefore, it is suggested that:

- (a) In each case a definite time-frame for comments from the authorities and the public in the affected Party should be specified;
- (b) The amount of time granted for these comments should be equal to that given to the authorities and the public in the Party of origin, and should not include any time required for translation and transmittal.

II. THE CONTENT OF THE NOTIFICATION UNDER ARTICLE 3, PARAGRAPH 2, OF THE CONVENTION

Article 3, paragraph 2, describes the required content of the notification. In practice, the information included in the notification may, however, vary in detail, due, for instance, to the nature of the proposed activity. If the affected Party is notified very early on, such information could be comparatively brief, since the Party of origin will have no detailed data available. A notification given later in the process will probably contain more specific information. Thus, the actual content of the notification would depend on the particular moment in the EIA process when the affected Party is notified.

The notification should include sufficient information for the affected Party to arrive at an informed decision on whether or not to take part in the EIA procedure. In addition, the Convention requires that the notification should contain as much information as possible in each specific case. Furthermore, it would be useful for the Party of origin to address the subject of translation in the notification.

III. RESPONSIBILITY FOR THE PROCEDURAL STEPS TO ENSURE THE PARTICIPATION OF THE PUBLIC OF THE AFFECTED PARTY IN THE EIA PROCEDURES OF THE PARTY OF ORIGIN

Article 3, paragraph 8, of the Convention requires the concerned Parties to ensure that the public of the affected Party in the areas likely to be affected is informed of, and 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. Similarly, under Article 4, paragraph 2, the concerned Parties shall arrange

for the distribution of the EIA 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. In either case the following questions should be answered:

- (a) Are the concerned Parties to carry out those tasks jointly; or, if not,
 - (b) Which Party is to be responsible for which tasks?

In this matter, the rights and obligations of each Party under international law should be borne in mind; for instance, the Party of origin will be able to conduct public hearings in the territory of the affected Party only with the consent of the latter Party.

For reasons of expediency and unless the concerned Parties agree otherwise, the tasks should be divided between them, and each Party should fulfil the tasks that fall within its own range of competence. Thus, the Party of origin should, in the context of Article 3, paragraph 8, provide the relevant information on the proposed activity to the affected Party; and receive these comments and objections unless the comments and objections by the public of the affected Party are to be sent directly to the competent authority. The affected Party, on the other hand, should be responsible for specifying the arrangements for distributing the information on the proposed activity in its own country (by means of the press, posters, or other media); and, unless the comments and objections are to be transmitted directly to the Party of origin or its competent authority, should collect these comments and objections and forward them to the Party of origin or to its competent authority.

Likewise, in the context of Article 4, paragraph 2, the Party of origin should transmit the EIA documentation to the affected Party and, unless the comments are transmitted directly to the competent authority, receive these comments. The affected Party should specify the arrangements for distributing the documentation to its own authorities and the public, and, unless the comments are to be forwarded directly to the Party of origin or its competent authority, collect these comments and transmit them to the Party of origin or its competent authority.

To the extent possible, the transboundary information exchange should be carried out by the concerned Parties in the most direct way.

The way in which the tasks mentioned in Article 4, paragraph 2, are fulfilled should conform to the EIA procedure of the Party of origin, as this procedure is relevant to the proposed activity. The information should be made available to the public of the affected Party in accordance with the normal practice of that Party for the distribution of information.

Specific bodies, like coordination centres, or different procedures which may be expedient in some cases may be agreed upon by the concerned Parties.

IV. RESPONSIBILITY FOR TRANSLATIONS AND THE COSTS OF TRANSLATIONS

Participation of the affected Party, its authorities and its public in the EIA procedure in the Party of origin, as well as effective cooperation under the Convention, will often require documents and verbal statements to be translated. In particular, one or all concerned Parties may be interested in the translation of the following matter:

- -Notification of a proposed activity (Art. 3, paras. 1 and 2);
- -Response to that notification (Art. 3, para. 3);
- —Information to be given by the Party of origin upon receipt of a response from the affected Party (Art. 3, para. 5);
- —Information relating to the potentially affected environment (Art. 3, para. 6);
- —Information to the public about the proposed activity (Art. 3, para. 8);
- —Comments and objections by the public of the affected Party on the proposed activity (Art. 3, para. 8);
- —The EIA documentation (Art. 4, para. 1);
- —Comments on the EIA documentation by the authorities and the public of the affected Party (Art. 4, para. 2); and
- —The final decision on the proposed activity (Art. 6, para. 2).

In each of these cases, the following questions should be answered:

- -Is translation necessary?
- —Which of the concerned Parties should be responsible for and bear the cost of translation?

A. Necessary translations

The documentation mentioned above varies considerably in length. While information under Art. 3, para. 1, of the Convention may be relatively brief, the EIA documentation (Art. 4, para. 1) may consist of several hundred pages, depending on the national requirements in the Party of origin. Also, the final decision on the proposed activity may, together with the reasons and considerations on which it is based, be a rather extensive document; although this again varies from country to country and from case to case.

However, translation is required in all cases where language differences exist and where the language in which a document is produced may not be understood by those who should read it.

As far as the translation of the EIA documentation (Art. 4 and Appendix II) is concerned, those parts of the EIA documentation that, in addition to the summary, deal with the environmental impact of the proposed activity in the territory of the affected Party or have a bearing on this impact should be translated. This would mean

that, of the information listed in Appendix II, the following items would have to be translated:

- —The description of the proposed activity and its purpose (para, a);
- —The description, where appropriate, of reasonable alternatives (for example, locational or technological) to the proposed activity and also the no-action alternative (para. b);
- —The non-technical summary including a visual presentation, as appropriate (maps, graphs, etc.) (para. i).

The following information, listed in Appendix II, would have to be translated only in so far as it concerns environmental impact in the affected Party:

- —The description of the environment likely to be significantly affected by the proposed activity and its alternatives (para. c);
- —The description of the potential environmental impact of the proposed activity and its alternatives and an estimate of its significance (para. d);
- —The description of mitigation measures to keep adverse environmental impact to a minimum (para. e);
- —The explicit indication of predictive methods and underlying assumptions as well as the relevant environmental data used (para. f);
- —The identification of gaps in knowledge, and the uncertainties encountered in compiling the required information (para. g);
- —The outline for monitoring and management programmes and any plans for post-project analysis, when included in the EIA documentation (para. h).

For the other items of information specified in the Convention, the need for translation should be determined as early as possible by the concerned Parties on a case-by-case basis. However, as a general rule, information addressed to the general public is more likely to require translation. In short, three categories of information can be distinguished:

- (a) Documents which are likely to require translation, such as:
- —The notification to be given by the Party of origin (Art. 3, para. 1);
- —The response to be given by the affected Party (Art. 3, para. 3);
- —The information to be given by the Party of origin (Art. 3, para. 5);
- —The information to be given by the affected Party (Art. 3, para. 6);
- (b) Information which is likely to require translation, but may need to be translated in full only in so far as it concerns transboundary impact, otherwise a summary translation, relating to the following, may be sufficient:
- Information about the proposed activity (Art. 3, para. 8);

- —The final decision on the proposed activity (Art. 6, para. 2);
- (c) Information which will need to be translated in full where this is required by the administrative or legal procedures of the Party of origin, relating to the following:
- —Comments and objections by the public of the affected Party, under Article 3, paragraph 8;
- —Comments by the authorities and the public of the affected Party, under Article 4, paragraph 2.

B. Responsibility for and costs of translations

Opinions may differ as to whether it is more expedient (less time-consuming and less costly) for the Party giving the information (the Party of origin in the case of Article 3, paragraph 1, and the affected Party in that of Article 3, paragraph 6, of the Convention), or for the Party receiving the information to be responsible for the translations. On the other hand, the Party responsible for translation should also bear the cost of translation. A case can be made for the Party of origin for which the EIA is being carried out and whose domestic law governs the EIA procedure to be responsible for the translations. The affected Party will only participate in the EIA procedure. Therefore, the Party of origin should be competent and responsible for the whole of the EIA procedure (except those merely procedural steps which, under international law, only the affected Party can carry out). Finally, in general, it would be easier for the Party of origin than for the affected Party to recover these costs from the proponent.

Consequently the Party of origin should be responsible for the translations and should also bear the related costs, unless the concerned Parties have agreed otherwise. The concerned Parties may jointly establish or authorize organizations to translate the relevant documents. Such organizations would have to guarantee professional standards.

V. ORGANIZATIONAL QUESTIONS

Although it is self-evident that each Party may decide for itself which of its authorities should be charged with the tasks under the Convention, it is advisable that those authorities that already have responsibilities in relation to the EIA or similar procedures under domestic law should also assume the tasks described in the Convention. Such an arrangement would seem useful since, under the Convention, the EIA will, in practice, follow the domestic procedures of the Party of origin; and transboundary cooperation under Articles 2 to 7 of the Convention will take place within the framework of these procedures.

VI. CONCLUSION

Current practice does not reflect the full implementation of the provisions of the Convention. There is at present a diverse experience in EIA in a transboundary context, and it can be concluded that until now no uniform approach to transboundary information exchange has been followed. The approaches proposed could serve as guidance to competent national authorities in the practical application of relevant provisions of the Convention. Experience gained in following these approaches could be examined in due course.

In the meantime, further legal and administrative aspects which have not been highlighted could be considered in depth. Future activities could aim, for instance, at:

- (a) The drawing-up of a harmonized format for the notification documents under Article 3 of the Convention:
- (b) The development of guidance in cases where the concerned Parties have different environmental quality standards:
- (c) The consideration of mechanisms for quality control of the EIA documentation in a transboundary context;
- (d) The drawing-up of recommendations for the undertaking of public hearings in a transboundary context;
- (e) The development of a model for bilateral or multilateral agreements, taking into account Appendix VI to the Convention and the findings described above.

Part Three

SPECIFIC METHODOLOGICAL ISSUES OF ENVIRONMENTAL IMPACT ASSESSMENT IN A TRANSBOUNDARY CONTEXT

INTRODUCTION

This part focuses on issues relevant to a clearer identification of proposed activities requiring environmental impact assessment (EIA), as listed in Appendix I to the Convention on Environmental Impact Assessment in a Transboundary Context, and to the determination of the significance of transboundary impact. It attempts to provide general guidance on these issues to competent national authorities in the practical application of the Convention. It also addresses specific aspects concerning the harmonization of methods for predicting environmental impact and identifies priority areas for further work. It takes into account the information contained in the document prepared at the workshop on methodological aspects of EIA held in Stockholm in 1992 and comments on that document by the delegations of Croatia, Estonia, Finland, the Netherlands, Norway, Poland, the Republic of Moldova, the Russian Federation, the United Kingdom, and the Commission of the European Communities. It is also based on the results of the consultation of governmentally designated experts from Canada, Finland, Germany, Hungary, Norway, Slovakia, Spain, Sweden, the United Kingdom and the United States of America, held in Geneva from 7 to 9 June 1993.

I. CLEARER IDENTIFICATION OF PROPOSED ACTIVITIES REQUIRING EIA

Many of the activities listed in Appendix I to the Convention are fairly well defined. The most important exception is the activity "integrated chemical installations". At the Stockholm workshop it was suggested that six different types of chemical installations could be identified under this activity. However, the United Nations International Standard Industrial Classification of All Economic Activities (ST/ESA/STAT/SER.M/4/Rev.3) lists nine classes of activities under "Manufacture of chemicals and chemical products":

- 2411 Manufacture of basic chemicals, except fertilizers and nitrogen compounds
- 2412 Manufacture of fertilizers and nitrogen compounds
- 2413 Manufacture of plastics in primary forms and of synthetic rubber
- 2421 Manufacture of pesticides and other agrochemical products
- 2422 Manufacture of paints, varnishes and similar coatings, printing ink and mastics

- 2423 Manufacture of pharmaceuticals, medicinal chemicals and botanical products
- 2424 Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
- 2429 Manufacture of other chemical products not elsewhere classified
- 2430 Manufacture of man-made fibres.

Both the six types of chemical installations identified at the Stockholm workshop and the nine classes of chemical manufacturing activities under the United Nations Standard Classification would need further specification if applied for the purposes of the Convention. It is unlikely, for instance, that all installations (small ones, particularly) involved in the manufacture of chemicals and chemical products would cause a transboundary impact. Reasonable production or other thresholds would have to be looked at.

In that respect, the very word "integrated" in Appendix I to the Convention may serve as a threshold. In some ECE countries, an integrated installation is generally understood to be an installation or a group of installations in the same geographical location, where two or more linked chemical or physical processes are employed on an industrial scale. This definition might be helpful for the identification of integrated chemical installations for the purposes of the Convention. Of all the planned chemical manufacturing activities that are scrutinized, those which involve several inter-linked types of chemical production in the same geographical location may become the primary subjects of transboundary EIA. Additional thresholds would be needed to narrow down, as far as possible, any remaining ambiguity.

The words "major" and "large" are used to set a threshold for several activities in Appendix I to the Convention. The wording suggests that the Convention applies only to a subset of all possible units of activities under consideration. More specific thresholds for "major" and "large" could be found by examining the activities with respect to their size measured in appropriate units. Difficulties in determining thresholds may arise, inter alia, due to the differences in environmental, social and economic conditions in a geographical area under consideration for the purposes of the Convention.

Numerous difficulties notwithstanding, specific thresholds would serve as useful initial guidance in the application of the Convention. It will have to be decided

whether or not an activity belongs to the list of proposed activities in Appendix I to the Convention, before the significance of the likely transboundary impact can be considered. Therefore, annex I below proposes types and parameters for those activities listed in Appendix I to the Convention for which no thresholds have been specified.

According to the definition of "proposed activity" (Art. I (v)), the Convention deals also with any major change to an activity subject to a decision of a competent authority in accordance with an applicable national procedure. The Convention does not define what a major change is, and the decision on the applicability of the Convention will therefore be partly based on judgement. The basic criteria would be that the existing activity subject to a major change is included in Appendix I to the Convention, and that authorization from a competent authority is required for that change.

Examples of major changes may include building on additional production capacities, large-scale employment of new technology in an existing activity, re-routing of motorways, express roads or airport runways changing the direction of take-off and landing. Consideration would have to be given to a change in investments and production (volume and/or type), physical structure or emissions. Cases where the major change would represent an increase of the same magnitude as the threshold specified in Appendix I to the Convention or of a threshold proposed in annex I below, as appropriate, could be examined first of all. Particular consideration should also be given to cases where the proposed changes would bring existing activities up to such thresholds.

II. "SIGNIFICANCE" OF ADVERSE TRANSBOUNDARY IMPACT

The consideration of the "significance" of an adverse transboundary impact will always be part of the decision to apply the Convention. Criteria on the significance of any impact should be set in a general decision-making framework. In some cases, it may be possible to establish generally acceptable criteria on significance. In most cases, however, the decision that an adverse transboundary impact is likely to be significant would be based on a comprehensive consideration of the characteristics of the activity and its possible impact. An element of judgement would always be present.

At the national level, various approaches to the determination of the significance of an impact have been developed in ECE countries. They are described in the ECE publication *Policies and Systems of Environmental Impact Assessment* (Environmental Series, No. 4). Within a country, detailed criteria can be used taking into account specifics of the national EIA legislation, administrative practices, and environmental conditions. In some countries, particular criteria have been used to draw up lists of activities subject to an EIA at the national level. These lists are usually more extensive than the one included in Appendix I to the Convention. The advantage of establishing and applying lists of activities, considered a priori to have a significant adverse impact,

is that both authorities and proponents know when an EIA has to be carried out.

In some countries, the application of EIA is at least partly based on a case-by-case judgement. This approach is more flexible, but still calls for guidance in order to increase the predictability of decisions, provided that information on the type of activity is available. Guidance on decisions can be given, for example, by identifying locations/areas where proposed activities are subject to special scrutiny. Other criteria used as a basis for decisions on significance include the size of the activity, the nature of the impact, the degree of risk, public interest and environmental values.

A regional framework for a transboundary EIA would be less detailed than national frameworks, bearing in mind, in particular, that it has to be flexible enough to cover different national frameworks and approaches. Bilateral or multilateral agreements concluded according to Article 8 of the Convention could provide further arrangements for the implementation of obligations under the Convention.

The decision to notify other Parties is a central decision in EIA in a transboundary context. At this stage, the determination of whether or not the proposed activity is likely to cause a significant adverse transboundary impact would be based on limited avaitable information, normally supplied by the proponent of the activity. Detailed knowledge of the extent and magnitude of impacts would not be generally available.

To minimize delays in carrying out a transboundary EIA, the decision to notify and the notification should be accompanied by a concise motivation for the decision. The motivation could depend on the identification and ranking of transboundary impacts with respect to their significance and would thus to a large extent determine the focus of the transboundary EIA. Without a clear focus, which is determined at an early stage in the EIA process, resources could be wasted on assessing in detail impacts of secondary importance.

In many cases, the first step could be to consider a range of possible impacts and causes of impacts associated with the proposed activity. Using preliminary information on the proposed activity and its alternatives, the questionnaire presented in annex II below could be helpful in identifying the likely adverse impacts of a proposed activity on the transboundary environment. Examples of major types of emissions and other causes of impacts, as included in annex III below, may provide guidance in completing this questionnaire.

Many of the activities listed in Appendix I to the Convention have a wide range of possible impacts. The general guidance for the decisions related to the initiation of a transboundary EIA should, therefore, not be too specific. The relative importance of the emissions associated with an activity will change with the development of technology and practices as well as with a better knowledge of the impacts. For example, knowledge of chemicals and their impacts is rapidly expanding. The criteria for the initiation of a transboundary EIA related to the use and likely release of chemicals should therefore be continuously updated. On the other hand, there is

no point in selecting a limited set of chemicals as criteria, because such an approach could define transboundary impacts too narrowly.

For many activities the related major emissions and other causes of impacts are well-known. For a transboundary EIA, it could be argued that the focus should in general be on emissions having long-distance effects and on emissions covered by international environmental agreements or supranational regulations such as European Community directives. For example, the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992, establishes the following list of harmful substances which should be given priority in preventive measures:

- -Heavy metals and their compounds;
- --Organohalogen compounds;
- —Organic compounds of phosphorus and tin;
- —Pesticides, such as fungicides, herbicides, insecticides, slimicides, and chemicals used for the preservation of wood, timber, wood pulp, cellulose, paper, hides and textiles;
- Oils and hydrocarbons of petroleum origin;
- Other organic compounds especially harmful to the marine environment;
- -Nitrogen and phosphorus compounds;
- -Radioactive substances, including wastes;
- Persistent materials which may float, remain in suspension or sink;
- —Substances which cause serious effects on the taste and/or smell of products for human consumption from the sea, or effects on the taste, smell, colour, transparency or other characteristics of water.

Similar lists have been developed in other conventions and agreements such as the ECE Convention on the Transboundary Effects of Industrial Accidents (Helsinki, 1992). These conventions and agreements may help to focus the transboundary EIA, because pollution substances listed in international legal instruments reflect accumulated knowledge and general international concern. A systematic check of relevant international instruments in the field of the environment could be useful in identifying the likely transboundary impact of a proposed activity. A reference list of selected instruments in that respect is presented in annex IV below.

When a set of likely transboundary impacts has been comprehensively identified, the significance of each impact will have to be examined, by using, for example, the framework proposed in annex V below.

The extent and magnitude of a likely impact related to a proposed activity may contribute to the significance of an impact. In that regard, annex VI below provides a conceptual tool for making the necessary judgement. An overall conclusion on the degree of significance would require combining the consideration of the geographical scale of a likely impact and its magnitude in areas under the jurisdiction of other countries with information on environmental conditions in these areas and the duration, frequency, probability and reversibility of the impact. The possibility that an activity may lead to a significant

adverse transboundary impact by contributing to the cumulative effect of existing, individually insignificant impacts, should also be considered.

Likely affected areas may differ with respect to their environmental importance such as ecological value and sensitivity. For example, critical loads of acidifying substances vary and significant loads will accordingly differ between regions. Site-specific environmental conditions may for that purpose require the application of more stringent limits than those prescribed in relevant international instruments. These considerations will have to be taken into account in judging the significance of a likely transboundary impact.

The duration of an impact may in some cases be restricted to a particular phase. Dredging waterways and ports may, for example, cause temporary transboundary turbidity or release hazardous substances from sediments. Other activities, such as the construction of a motorway, represent a virtually permanent change of the environment. The *frequency* of the impact may depend on the activity. For example, the impact of an inland waterway would be dependent on both the number and tonnage of the vessels utilizing it.

Further categorization of an impact could be made regarding its *probability*. This will serve to categorize the continuum of impacts, ranging from those that would arise with certainty to those which are unlikely, but which do represent risks related to the activity. Different thresholds of significance are likely to be applied to the different categories of impacts.

Impacts which are highly likely to occur are usually those which arise due to continuous emissions or due to an immediate physical restructuring of the environment as a consequence of the activity. Impacts which are much less likely to occur would require a different type of consideration from that used for highly probable impacts. Some impacts may occur only in the event of an accident or abnormal operation, whereas others may occur due to normal emissions which under special circumstances cause extensive impacts. Examples include the wide distribution of pollutants in surface waters during specific hydrological regimes or the accumulation of airborne pollutants in limited areas due to weather conditions.

The risk of an impact could be defined as the consequences of the impact multiplied by the probability of occurrence. If environmental risks in relation to a proposed activity are relevant, the transboundary EIA would have to involve discussions on acceptable levels of risk. In some cases, the probability of impacts could be assessed in terms of the frequency of occurrence. For most environmental risks related to the activities listed in Appendix I to the Convention, a frequency approach would however not be sufficient in an analysis of risks as part of a transboundary EIA. Many risks related to transboundary impacts are characterized by low probability. Thus, there would be no or very weak empirical justification for an analysis based on frequencies. For example, estimates of risks of nuclear accidents, explosions at integrated chemical installations or the breaking of dams could only to a limited extent be based on

empirical data for frequency of occurrence. A systematic evaluation of potential impacts of low probability and of factors influencing the probability is likely to be important.

If specific information on the likely impacts of a proposed activity is insufficient for determining the significance of a transboundary impact, the characterization of the *context of a proposed activity* (annex VII below may help to make the final decision).

When considering the general characteristics of an activity, the distance to an international frontier is an important starting-point. If an activity is planned for a site close to a frontier, the nature of the activity and its associated transboundary impact can be sufficient to require a notification according to the Convention. Many activities listed in Appendix I to the Convention would inevitably require notification if the planned site was close to a frontier.

If the site for the planned activity is at a considerable distance from the frontier, the distance alone would not be a sufficient basis for a decision on notification. The next aspect that could be considered would be the existence of transfer mechanisms for the impact, such as transboundary watercourses and international lakes, coastlines or sea areas, prevailing winds and migration of organisms which may provide indications of the likely transboundary impact. (Some experts took the view that areas in all countries which could be affected by longrange transmission of pollutants should be considered in that respect.)

In a situation where neither specific information on the likely impacts nor the general characteristics of the activity are considered sufficient to arrive at a definite conclusion on the significance of a transboundary impact, but where the level of uncertainty is high, the country of origin may still notify affected countries in order to reach a mutual understanding on the significance of the impact of the proposed activity.

Final determination of the significance could be based on explicit or implicit weighing of different types of likely impacts. The development of methods to rank the different impacts and their relevant dimensions may be useful in determining the overall significance of the transboundary impact associated with an activity. Weighing and ranking could be more complex than the identification of all likely "major" and "minor" impacts, because it would frequently involve a trade-off between different types of impacts. There is no definite common scale for comparing, for example, effects on flora and fauna with effects on landscape and historic monuments. While there are various difficulties in developing sound ranking methods, ranking could neverthe-

less allow a more systematic approach to determine the significance of impacts and guide decision-making on transboundary EIA.

Consequently, it could be concluded that there would be no automatic application of the Convention, as the possibility of a significant adverse transboundary impact would always be reviewed carefully. The determination of the possibility of such an impact for the purpose of notification could be hierarchically structured following the sequence of the flow chart presented in annex VIII below.

III. HARMONIZATION OF METHODS AND STANDARDIZATION

Harmonization activities in the context of transboundary EIA could ensure a common understanding of concepts and terms, remove incompatibilities, improve the quality of EIA, and save resources. Harmonization can refer to the harmonization of methods, the harmonization of legal and administrative procedures, and the development of relevant standards.

Harmonization of EIA methods in a transboundary context involves the development of common frameworks to assist decision-making at all stages of the EIA process. The frameworks could include the determination of the spatial and temporal boundaries for the assessment and evaluation criteria for impact predictions. Since the significance of an impact will be assessed using a multi-dimensional framework, it is unlikely that evaluation criteria could always give unambiguous answers on the interpretation of impact predictions. Although such criteria may provide useful reference points in evaluating the predictions, specific consideration would have to play an important role in the final decision-making on the proposed activity. Harmonization could also be helpful with respect to the specific terminology used in EIA documentation, the structure of such documentation, etc.

In order to help common understanding, it would be helpful to use, wherever applicable, internationally accepted units and standards in transboundary EIA. It should be noted in that respect that the International Organization for Standardization (ISO) and the European Committee for Standardization (CEN) have recently initiated discussions on the standardization of environmental management tools such as EIA. So far, standardization activities have focused on such items as: sampling and monitoring methods, descriptive units (e.g. micro g/m³ for air quality), spatial and temporal scales (e.g. volume of soil samples) and criteria for data quality control. Enlarging the scope of the ongoing standardization activities seems to be necessary.

ANNEXES

Annex I

POSSIBLE TYPES AND PARAMETERS TO BE CONSIDERED FOR ACTIVITIES LISTED IN APPENDIX I TO THE CONVENTION FOR WHICH NO SPECIFIC THRESHOLD IS GIVEN THEREIN

Major installations for the initial smelting of cast-iron and steel and for the production of non-ferrous metals

- (i) The roasting and sintering and calcining of iron ores in installations designed for the processing of 1 million tonnes or more of ore a year
- (ii) All coke ovens
- (iii) Installations for the production of pig iron and crude steel designed for a production of 1 million tonnes or more of iron per year
- (iv) Installations for steel production from scrap designed for a production of 200,000 tonnes or more of steel per year
- (v) Installations for the processing of non-ferrous heavy metal ores designed for a production of 100,000 tonnes or more per year
- (vi) Installations for the production, recovery or processing of non-ferrous metals, their compounds or other alloys by thermal, chemical or electrolytics designed for a production of 100,000 tonnes or more per year

Integrated chemical installations

Industrial installations or groups of installations in the same geographical location where two or more linked chemical or physical processes are employed on an industrial scale for the manufacture of chemicals or chemical products. These installations may represent one or more chemical installations

Large-diameter oil and gas pipelines

Pipelines with a diameter of 600 mm or more

Large dams and reservoirs

Dams with a height of 15 m or higher and/or reservoirs with a surface of 2 km² or more

Major mining, on-site extraction and processing of metals ores or coal

- (i) Installations for the mining, on-site extraction and processing of 1 million tonnes or more of iron ore per year
- (ii) Installations for the mining, on-site extraction and processing of 100,000 tonnes or more of noniron ore per year
- (iii) Installations for the mining, on-site extraction and processing of 100,000 tonnes or more of coal per year

Major storage facilities for petroleum, petrochemical and chemical products

Installations designed for the storage of 50,000 m³ or more of petroleum; of 50,000 m³ or more of petrochemical products; and of 50,000 m³ or more of chemical products

Deforestation of large areas

Areas of 2 km² or more

Annex II

INDICATIVE QUESTIONNAIRE FOR THE IDENTIFICATION OF ADVERSE TRANSBOUNDARY IMPACT

1. Can the proposed activity or its reasonable alternatives result in one or more of the following adverse transboundary impacts:

AIR

- -Changes in ambient air quality
- -Release of any toxic or hazardous air pollutant, radiation, or genetically engineered organisms

WATER

- -Surface water: Changes in water quality or water quantity
- -Groundwater: Changes in water quality or quantity
- -Coastal water: Changes in quality
- -Sediments: Changes in quality and quantity (riverine, estuarine, coastal)
- -Release of any toxic or hazardous water pollutant, radiation, or genetically engineered organisms

CLIMATE

- -Microclimatic changes (temperature, rainfall, wind)
- 2. Can the proposed activity, or the related effects listed above, result in one or more of the following adverse transboundary impacts:

SOIL

—Changes in soil acidification, contamination, or erosion

LANDSCAPE/HISTORIC MONUMENTS OR OTHER PHYSICAL STRUCTURES

- -Changes in land use
- -Decreased aesthetic appeal or changes in visual amenities
- -Changes in historical, archaeological, paleontological, or architectural resources
- -Changes to well-being and quality of life
- —Changes in quality and quantity of recreational opportunities or amenities
- -Changes to present or potential use of natural resources (e.g. fisheries, recreational use, agriculture/forestry)
- -Impacts on sensitive lands or areas of special environmental or cultural importance

HUMAN HEALTH AND SAFETY

- -Changes in ambient noise levels
- -Changes in disease incidence

FLORA, FAUNA

- -Changes in migratory patterns (birds, fish, mammals, etc.)
- -Disturbance of habitat
- -Decrease in bio-diversity
- -Impacts on threatened species
- -Changes in species composition
- 3. Can the proposed activity present any transboundary catastrophic risk?
- 4. Can the proposed activity invoke any existing international agreement on environmental matters?
- 5. Can the proposed activity affect interactions among environmental factors?

Annex III

EXAMPLES OF MAJOR TYPES OF EMISSIONS AND OTHER CAUSES OF IMPACTS CONNECTED WITH PROPOSED ACTIVITIES LISTED IN APPENDIX I TO THE CONVENTION

Crude oil refineries and installations for the gasifica- tion and liquefaction of coal or bituminous shale	Human health and safety: Increased risk of accidents
	Air: SO_2 , NO_x , and volatile organic compounds (VOC)
	Water: Oil, nutrients, chemical oxygen demand/total organic carbon (COD/TOC), phenolic compounds and other hazardous substances
	Soil/Landscape: Changes in land use by related infrastructure
	Flora and fauna: Disturbance of habitats
Thermal power stations and other combustion instal- lations and nuclear power stations and other nuclear	Human health and safety: Increased risk of accidents
reactors	Air: SO ₂ , NO _x , particles and hazardous substances
	Water: Hazardous substances and changes in temperature
	Soil/Landscape: Changes in land use by related infrastructure
	Flora and fauna: Disturbance of habitats
Installations for the production or enrichment of nuclear fuels, the reprocessing of irradiated nuclear fuels or the storage, disposal and processing of radioactive waste	Human health and safety: Increased risk of accidents Air: Radionuclides Water: Radionuclides Soil/Landscape: Changes in land use by related infrastructure Flora and fauna: Disturbance of habitats
Major installations for the initial smelting of cast- iron and steel and for the production of non-ferrous metals	Air: SO ₂ , NO _x , particles, heavy metals, fluorides, poly-aromatic hydrocarbons (PAH) and other hazardous substances
	Water: Nutrients, NH ₄ , COD/TOC, PAH, heavy metals, cyanide and other hazardous substances
	Soil/Landscape: Changes in land use by related infrastructure
	Flora and fauna: Disturbance of habitats
Installations for the extraction of asbestos and for	Air: Asbestos fibres
the processing and transformation of asbestos and products containing asbestos	Water: Suspended solids
Integrated chemical installations	Human health and safety: Increased risk of accidents
	Air: SO ₂ , NO _x , heavy metals, and other hazardous substances
	Water: Nutrients, COD/TOC, heavy metals, adsorbable organic halogenated compounds and other hazardous substances
	Soil/Landscape: Changes in land use by related infrastructure

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Construction of motorways, express roads and lines for long-distance railway traffic and of airports	Human health and safety: Increased risk of accidents
	Air: NO _x , VOC, noise and vibration
	Water: Nutrients, oil and other hazardous substance
	Soil/Landscape: Changes in land use
	Flora and fauna: Erosion, barriers for fauna, disturb-
·	ance in habitats
Large-diameter oil and gas pipelines	Human health and safety: Increased risk of accidents
	Air. VOC
	Water: Oil
	Soil/Landscape: Changes in land use
	Flora and fauna: Disturbance in habitats
Trading ports and also inland waterways and ports for inland-waterway traffic	Human health and safety: Increased risk of accidents
·	Air: SO ₂ , NO ₂ and hazardous substances
	Water: Dredge spoils, ballast water, oil and other hazardous substances
	Soil/Landscape: Changes in land use, coastal erosion
	Flora and fauna: Disturbance in habitats
Waste-disposal installations for the incineration, chemical treatment or landfill of toxic and danger-	Human health and safety: Increased risk of accidents
ous wastes	Air: NO _x , VOC, heavy metals and other hazardous substances
	Water: COD/TOC, heavy metals, and other hazard- ous substances
Large dams and reservoirs	Human health and safety: Increased risk of acci- dents
	Water: Nutrients, COD/TOC, heavy metals
	Soil/Landscape: Changes in land use, sediments
	Flora and fauna: Erosion, barriers, disturbance iin
	habitats
Groundwater abstraction activities	Water: Change in water table
Pulp and paper manufacturing	Human health and safety: Increased risk of acci- dents
	Air: SO ₂ , NO _x , smell Water: Nutrients biochemical ovvgen demand
	Water: Nutrients, biochemical oxygen demand (BOD), COD/TOC, adsorbable organic halogenated compounds (AOX) and other hazardous substances
	Soil/Landscape: Changes in land use by related infrastructure

Major mining, on-site extraction and processing of metals ores or coal	Air: SO ₂ , NO _x , noise, particles, heavy metals, and other hazardous substances Water: Nutrients, heavy metals and other hazardous substances Soil/Landscape: Changes in land use by related infrastructure Flora and fauna: Disturbance of habitats
Offshore hydrocarbon production	Human health and safety: Increased risk of accidents Air: SO _x , NO _x , VOC and other hazardous substances Water: COD/TOC, oil and other hazardous substances Soil/Landscape: Changes in land use by related infrastructure
Major storage facilities for petroleum, petrochemical and chemical products	Human health and safety: Increased risk of accidents Water: COD/TOC, AOX, oil and other hazardous substances
Deforestation of large areas	Water: Nutrients, heavy metals, suspended solids and COD/TOC Soil/Landscape: Erosion, desertification Flora and fauna: Change in habitats

Annex IV

SELECTED INTERNATIONAL INSTRUMENTS WHICH MAY PROVIDE GUIDANCE IN DETERMINING THE SIGNIFICANCE OF TRANSBOUNDARY IMPACTS OF AN ACTIVITY

Object of impact	International instruments
Human health and safety	—European Agreement concentring the International Carriage of Danger- ous Goods by Road (ADR), 1957
	—Agreements related to the use of nuclear energy
	-Convention on the Transboundary Effects of Industrial Accidents, 1992
	—Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment, 1993
	—EC directives, WHO recommendations
Flora and fauna	—Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971
	—Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and Belts, 1973
	—Convention on the Conservation of European Wildlife and Natural Habitats, 1979
	—Convention on the Conservation of Migratory Species of Wild Animals, 1979
	-United Nations Convention on the Law of the Sea, 1982
	—Convention on Biological Diversity, 1992
	—EC directives
Air	—Convention on Long-range Transboundary Air Pollution, 1979
	—Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent, 1985
	—Protocol to the 1979 Convention on Long-range Transboundary Air Pollution concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes, 1988
	—Protocol to the 1979 Convention on Long-range Transboundary Air Pollution concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes, 1991
	—Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Further Reduction of Sulphur Emissions, 1994
	—EC directives, WHO recommendations
Water	—Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1992
	-Transboundary water agreements such as the Rhine Action Programme, 1987
	—International Convention on Civil Liability for Oil Pollution Damage, 1969
	—International Convention relating to Intervention on the High Seas in Case of Oil Pollution Casualties, 1969
	—Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972
	—Convention on the Prevention of Marine Pollution from Land-based Sources, 1974

	—Convention for the Protection of the Mediterranean Sea against Pollution, 1976 (and related protocols) —United Nations Convention on the Law of the Sea, 1982 —Convention on the Protection of the Marine Environment of the Baltic
Climate	Sea Area, 1974, 1992 —Convention for the Protection of the Ozone Layer, 1985, and Protocol on Substances that Deplete the Ozone Layer, 1987
Landscape and historic monu- ments or other physical struc-	—Framework Convention on Climate Change, 1992 —Convention on the Protection of the Architectural Heritage of Europe, 1985
Cultural heritage and socio- economic conditions	—Convention Concerning the Protection of World Cultural and Natural Heritage, 1972 —Stockholm Declaration on the Human Environment, 1972
	—Rio Declaration on Environment and Development, 1992

Annex V

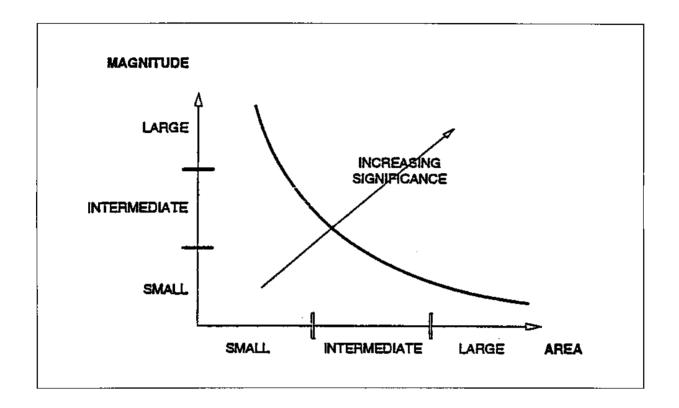
FRAMEWORK FOR CONSIDERING THE SIGNIFICANCE OF A TRANSBOUNDARY IMPACT

Dimension of impact	Relevant considerations
Geographical area	What is the extent of the area of a likely impact under the jurisdiction of another country?
Environmental importance	Are particular environmental values (e.g. protected areas) likely to be affected?
Magnitude	What will be the likely magnitude of the change in relevant variables relative to the status quo, taking into account the sensitivity of the variable?
Probability	What is the degree of probability of the impact? Is the impact likely to occur as a consequence of normal conditions or exceptional situations, such as accidents?
Duration	Is the impact likely to be temporary, short-term or long-term? Is the impact likely to relate to the construction, operation or decommissioning phase of the activity?
Frequency	What is likely to be the temporal pattern of the impact?
Reversibility	Is the impact likely to be reversible or irreversible?

Annex VI

A CONCEPTUAL TOOL FOR DETERMINING THE SIGNIFICANCE OF A TRANSBOUNDARY IMPACT

(Additional information from Annex V will have to be taken into account)



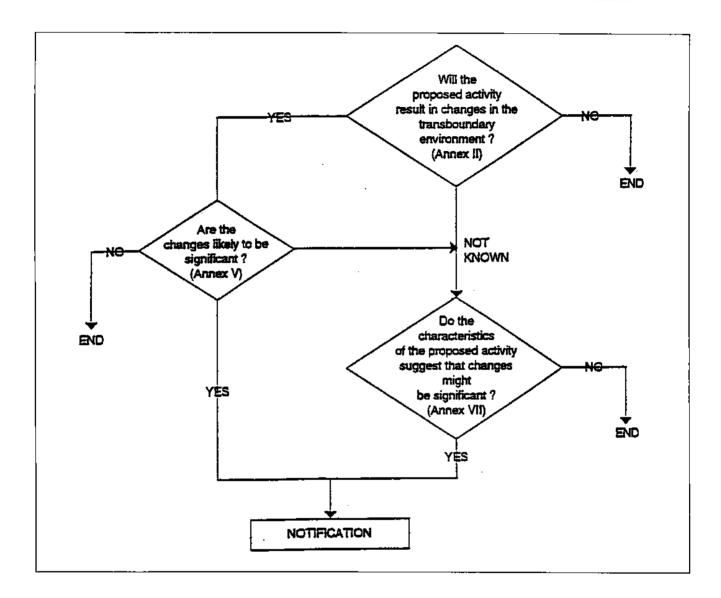
Annex VII

CHARACTERIZATION OF THE CONTEXT OF A PROPOSED ACTIVITY

Criteria	Relevant questions
Location	Will the proposed activity be situated close to an international frontier?
	Will transboundary watercourses, international lakes, coastlines, sea areas or prevailing winds increase the probability of an adverse transboundary impact?
	Will the proposed activity be situated close to sensitive areas such as centres of population, protected areas or habitats important for threatened or migratory species?
Size, extent and nature	Is the proposed activity a new activity or a major change to an existing one?
	Will the proposed activity involve major use of energy or other natural resources?
	Will the proposed activity be characterized by high levels of production?
	Will the proposed activity involve large physical structures?
	Will the proposed activity involve the application of new processes for which empirical knowledge of impacts is lacking?
	Will the proposed activity involve emissions of pollutants which can be transmitted across boundaries?
Policy context	Can the proposed activity conflict with known human health, safety and/or environmental plans, programmes or policies of the possibly affected country?
	Is the proposed activity subject to particular environmental scrutiny according to any bilateral or multilateral agreements?
	Can the proposed activity lead to a commitment to future development whose transboundary environmental consequences are not properly known?

Annex VIII

FLOW CHART FOR THE DETERMINATION OF THE LIKELY SIGNIFICANT ADVERSE TRANSBOUNDARY IMPACT FOR THE PURPOSE OF NOTIFICATION



Part Four

BILATERAL AND MULTILATERAL COOPERATION ON ENVIRONMENTAL IMPACT ASSESSMENT IN A TRANSBOUNDARY CONTEXT

INTRODUCTION

A workshop on key elements for bilateral and multilateral agreements on environmental impact assessment (EIA) in a transboundary context was organized by the delegation of the Netherlands from 27 to 30 November 1994 in Baarn (Netherlands), pursuant to a decision taken at the third meeting of the Signatories. The workshop was attended by experts from Albania, Armenia, Austria, Croatia, the Czech Republic, Estonia, Finland, Germany, Hungary, Italy, the Netherlands, Poland, the Republic of Moldova, Romania, the Russian Federation. Slovakia, Spain, Ukraine and the United Kingdom. It addressed specific issues related to bilateral or multilateral agreements and arrangements on EIA in a transboundary context. The delegations of Austria and Slovakia informed the workshop of the preparatory work undertaken on a possible bilateral arrangement on EIA between their countries. Their example, which is annexed below, proved to be of great value to the proceedings of the workshop.

BUILDING BRIDGES

GUIDANCE ON KEY ELEMENTS FOR BILATERAL OR MULTILATERAL ARRANGEMENTS ON EIA IN A TRANSBOUNDARY CONTEXT

As the entry into force of the 1991 Convention on Environmental Impact Assessment in a Transboundary Context draws near, it is important to develop tools for the effective application of the Convention's provisions.

Useful work has already been done as outlined in the reports of the task force on legal and administrative aspects of the Convention (see part two above) and the report on specific methodological issues of EIA in a transboundary context (see part three above). The task force made a number of proposals in its report for further work to consider certain aspects of the application of the Convention in more detail.

In response to one of these proposals, the Signatories to the Convention accepted, at their third meeting, an offer by Austria and the Netherlands to organize a work-

shop devoted to bilateral and multilateral agreements on EIA in a transboundary context (ENVWA/WG.3/6, para. 19). The Convention contains provisions on that matter in Article 8 and Appendix VI. According to these provisions, the Parties may continue existing or enter into new bilateral or multilateral agreements or other arrangements in order to implement their obligations under the Convention. Such arrangements may be based on the elements listed in Appendix VI.

The workshop noted, however, that bilateral and multilateral arrangements or agreements were not a precondition for the application, the ratification or the entry into force of the Convention or a requirement for its implementation or the implementation of the Resolution on Environmental Impact Assessment in a Transboundary Context (ECE/ENVWA/19).

The workshop examined further possible elements for the application of the Convention as guidance for the future Parties in implementing the Convention, particularly in the context of bilateral and multilateral cooperation. It was not the intention to repeat what was already in the Convention but rather to work out solutions for practical problems based, as far as possible, on existing practical experiences. It may be used by the Parties as a frame of reference for the application of the Convention on a case-by-case basis or for developing bilateral or multilateral arrangements or agreements.

To collect the basic information, a questionnaire was sent out in April 1994 by the delegation of the Netherlands to all focal points for the Convention. Subsequently, a small group of experts met in Vienna (31 August-2 September 1994) to discuss the results.

This part of the publication is based on the answers to the questionnaire and on the discussions at the Vienna expert meeting and the workshop. It indicates possible key elements for bilateral or multilateral arrangements or agreements such as further details of the application of the Convention, designation of contact points, translation of documents, financial aspects, how to inform and involve the public in the affected country, joint EIA, consultations between Parties, the decision, dispute settlement and post-project analysis. Where possible and appropriate, various solutions have been listed.

KEY ELEMENTS

A. General issues

A more effective application of EIA in a transboundary context depends on several factors, such as:

- —A mutual understanding of the national legal and administrative EIA systems and procedures of the countries concerned;
- —A common interpretation of the provisions of the Convention by the Parties;
- Good working relations on a subregional level between government authorities; and
- —More or less comparable environmental standards.

Bilateral or multilateral cooperation could benefit from an exchange of information on legal and administrative matters, on environmental data, and on the state of the environment in either country.

For an effective application of the Convention it could be very useful to inform the other Parties of the following:

- —The authorities responsible for EIA;
- —The authorities which will be involved at the various stages of the EIA process (with an indication of who does what exactly in the EIA process); and
- —The flow chart describing the various stages and timeframes of the national EIA process.

It could also be very useful to have:

- —A regular exchange of experts to present the respective national systems and discuss current problems and changes in legislation;
- -Access to environmental information; and
- -A joint EIA expert group.

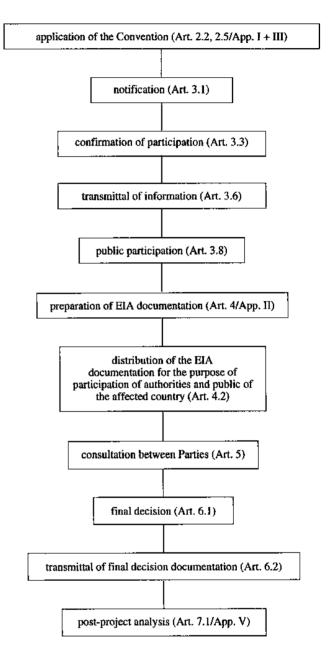
The arrangements for bilateral and multilateral cooperation in each case may differ, as the national systems differ considerably. In some cases it would make more sense to have bilateral arrangements or agreements with other individual countries instead of trying to agree on a multilateral arrangement with several countries simultaneously. In other situations the existing working relations may serve as a basis for the application of the Convention. Practice has shown that making an arrangement or an agreement for a specific activity is also feasible.

B. Procedural steps

The Convention requires a number of procedural steps as indicated in the flow chart below (fig. I); in some cases the sequence of some steps may be different. Different countries have different EIA procedures. Therefore, it might be useful in a bilateral or multilateral context, first to compare the procedural requirements of the Convention with the national procedural steps. Such a comparison will clarify similarities and divergences,

FIGURE I

Flow chart Convention, main procedural steps



and help to identify any future problems or opportunities for concerted action. The next step would then be to try to adapt the national procedures in line with the provisions of the Convention and to agree on the details of the procedure that should be followed whenever the Convention applies. As a general rule, the EIA procedure of the Party of origin applies whenever the Convention applies.

Practice has already shown that once this has been agreed upon in general terms, there is still a need to work out a detailed schedule in cases where the Convention applies. Such a schedule or flow chart could contain information on time-frames, on which authority sends which information to whom at what stage of the process, etc. Such a schedule could be part of or annexed to a bilateral or multilateral arrangement.

C. Application of the Convention

1. Activities

(a) Activities listed in Appendix I

The description of activities in Appendix I is in some cases too general (for example, "large dams and reservoirs"). To ensure a common interpretation, countries could specify what they understand by the terms used in the Convention, for instance by agreeing on threshold values (e.g. "dams with an output of more than [x] megawatts" or "with a surface of [y] ha"). Such provisions are intended to clarify what might be regarded as significant under the Convention. Parties should be careful not to narrow down the application of the Convention. Part three above also provides further guidance for a clearer identification of proposed activities as listed in Appendix I to the Convention.

(b) Activities not listed in Appendix I

By mutual agreement, countries can treat activities not listed in Appendix I as if they were listed (Art. 2, para. 5). There are several ways of doing this:

- —Countries could try to draw up a common catalogue of additional activities not listed in Appendix I and treat them in the same way as Appendix I activities;
- Countries could try to develop further detailed criteria for such additional activities making use of Appendix III to the Convention;
- —Countries could agree that the Convention applies to all activities under the EIA procedure of the country of origin. As the national lists of activities usually differ, the problem of the principle of reciprocity arises. Countries will usually only be prepared to carry out a "transboundary EIA" if the other country will, under similar circumstances, do the same;
- —Countries could decide on a case-by-case basis that the Convention applies to an activity not listed in Appendix I.

An example of the subregional work for the application of Article 2, paragraph 5, of the Convention is the work done by the Arctic countries under the Arctic Environmental Protection Strategy.

The determination of "significance"

The decision whether or not to apply the Convention will generally be based on the consideration of the "significance" of an adverse transboundary impact (Art. 2, paras. 3 and 4).

It may therefore be advisable to define more explicitly what countries understand by the term "significant adverse transboundary impact". This problem was also referred to in the report on specific methodological issues of EIA in a transboundary context (see part three above). This report as well as ongoing work might be of help to Parties. The work on specific methodological issues has shown that, in some cases, it may be possible

to establish generally acceptable criteria on significance. In most cases, however, the decision would be based on a comprehensive consideration of the characteristics of the activity and its possible impact. An element of judgement will always be present.

Practice has shown that as a criterion the location in an area within a certain distance from a border can be useful. For example, an arrangement could state that:

"Each activity mentioned in Appendix I and located in an area within [x] kilometres from the common border is likely to cause a significant adverse transboundary impact."

In such a case care should be taken not to exclude activities located further away from the border which nevertheless could cause such an impact. Thus, a provision could be added stipulating that:

"For activities listed in Appendix I but located outside the area mentioned, it should be decided on a case-by-case basis whether they are likely to cause a significant adverse transboundary impact."

Another possibility would be to indicate in an arrangement that:

"Any adverse impact on specified sensitive areas (e.g. nature conservation areas) in the affected country is considered to be significant."

It should be noted, however, that such clauses, again, cover only some cases where an impact may be "significant", and can thus not be exhaustive. Therefore, the opportunity to decide on a case-by-case basis should remain available.

D. Institutional arrangements

1. Designation of contact points

Various articles of the Convention require the country of origin to transmit information to the affected country and vice versa. In accordance with Article 3 of the Convention, document ENVWA/WG.3/R.5/Rev.1 contains a list of points of contact. If no point of contact has been designated, the notification should be transmitted to the Ministry for Foreign Affairs of the affected Party.

The Convention does not say how the exchange of information under Articles 2 to 7 should take place. Since legal and administrative systems vary considerably from country to country and are not always known in detail on the other side of the border, it has been found helpful to create specific contact points. These specific contact points could, for example, be the respective authorities carrying out the EIA in order to have direct contact with these authorities.

Contact points can assume various responsibilities and functions. They are usually the first contact for the Party of origin to which it sends the notification and in most cases it will also be the contact point which will respond to the notification. The contact point may have the following functions:

—Mail-box function: the contact point submits all the information it receives from the country of origin to the respective authorities, which then take action;

—Coordinating function: the contact point distributes the information to the respective authorities and the public of the affected country and collects their comments and reactions and submits them to the country of origin;

—Initiating function: the contact point is responsible merely for the first formal contact between the Parties and submits a list of authorities in the affected country to be directly addressed by the authorities of the country of origin.

For an effective application of the Convention it could be useful to designate, in addition to the national contact points in the list in document ENVWA/WG.3/R.5/Rev.1, contact points at the local or subregional level. Of course the procedure is simpler if there is only one contact point.

However, some countries (e.g. federations) may find it easier to have several such institutions (e.g. one in each federal State, or one in each province). In such cases it may be difficult for the other country to find out which of the contact points is competent in a given case. On a bilateral or multilateral basis a solution can be found. For example, such a problem can be avoided if the other country can choose the specific contact point to which it sends its information and which will then transmit the information to the relevant contact point(s). Another solution could be to contact the national government level and ask which contact point will have to be informed in a specific case. It was also found useful to specify the range of functions of the contact point(s).

2. Establishment of a joint body

Several of the tasks mentioned in the Convention could be fulfilled by a joint body (Art. 3, para. 6; Art. 4, para. 2; Art. 5). Countries may wish to set up such a joint body or to use already existing bodies for the purposes of the Convention. A joint EIA expert group could also fulfil these tasks. A bilateral or multilateral arrangement could contain provisions to that effect (e.g. composition and tasks).

For instance, a joint EIA expert group is working under the Nordic Council of Ministers. One of its tasks is to strengthen the practical application of the Convention within the Nordic countries and neighbouring areas. The workshop under the Arctic Environmental Protection Strategy has invited EIA experts in the Arctic countries to cooperate and assist national Governments in further developing their EIA systems to protect the environment in the Arctic.

E. Notification

Article 3, paragraph 1, of the Convention requires the Party of origin in cases where a proposed activity listed in Appendix I is likely to cause a significant adverse transboundary impact to notify any Party which it

considers may be an affected Party "as early as possible and no later than when informing its own public about that proposed activity". The precise time of notification depends on whether the EIA procedure of the Party of origin includes:

- (i) A formal scoping process with mandatory public participation;
- (ii) A formal scoping process without such participation; or
- (iii) No formal scoping process at all.

If a scoping process with mandatory public participation exists, the Party of origin will have to inform the affected Party at the beginning of that process. If public participation at this stage is optional, it will have to notify the affected country only if it informs its own public. As many countries have an informal scoping process with public participation, there is an obligation (and it is also in the interest of the Party of origin) to notify the public in the affected country at that stage. If there is an informal scoping process without public participation, it might also be advisable to notify the affected country at that stage. The definition of the moment of notification is an important one and could be agreed on in a bilateral or multilateral arrangement.

Further ways to proceed in those different cases are also mentioned in the final report of the task force on legal and administrative aspects of the practical application of relevant provisions of the Convention (see part two above).

Which information should be given with the notification documentation? Article 3, paragraph 2, of the Convention stipulates which information is to be given: information about the proposed activity, available information on its possible transboundary impact, the nature of the decision and a time-frame for response. A time-frame of one to four months was already suggested in the final report of the task force on legal and administrative aspects.

The task force on legal and administrative aspects of the application of the Convention proposed that a format for the content of these first pieces of information should be developed. The present workshop supported this proposal and suggested the development of such a format to the Meeting of the Signatories.

After a positive response, further information can be given according to Article 3, paragraph 5. It might be possible and useful in some cases to give this information already in the first step. The affected Party would then have more information at an earlier stage and can react more promptly and in more detail. In addition to this forwarded information, it might be helpful for the affected country to receive a separate report just dealing with the transboundary impact or a report highlighting the relevant passages if they are contained elsewhere.

Article 3, paragraph 6, of the Convention provides that the Party of origin may ask the affected Party for reasonably obtainable information about the affected environment for the preparation of the EIA documentation.

To obtain this information as soon as possible, it may be useful to ask for it in the notification. In that case the affected Party could provide, with its response to the notification, at least some available information about obviously affected areas (e.g. protected areas). The task force on legal and administrative aspects suggested that a period of up to four months might be sufficient.

A bilateral or multilateral arrangement could specify what is meant by "reasonably obtainable information". For instance, it could lay down that the environmental information relating to the state of the environment in the affected areas of the affected Party and available to its official bodies will be transmitted. In that case a coordinating contact point (as mentioned in subsection D.1 above) could play a supporting role in collecting the available relevant information within the affected country and in submitting it to the country of origin. As this stage of the EIA process can be very important for the preparation of the EIA documentation, it would be sensible to have an exchange of views by experts in this phase.

Countries may wish to include in a bilateral or multilateral arrangement a provision concerning the possibility to end the information process mentioned in Article 3, paragraphs 1 to 6, of the Convention. If the affected Party has indicated that it intends to participate in the EIA procedure but later wants to end its participation, a specific bilateral clause may state that "the affected country shall inform the country of origin to that effect in the same way as it has stated its intention to take part in the procedure".

F. How to inform and who informs the public of the affected Party, submissions of comments, public hearings

The Convention contains several provisions with regard to the information and involvement of the public of the affected Party (Art. 2, para. 6, Art. 3, para. 8, Art. 4, para. 2). To fulfil these requirements the concerned Parties should inform the public clearly about these opportunities. As the opportunities for the public to be involved differ from country to country, information should be given to the public in the affected Party about the participation process and the formal procedure in each case. This could, for example, be given either in a public advertisement or in the publication announcing a public hearing or in a special information brochure. Practice has already shown that there is a need to make more detailed arrangements in a bilateral or multilateral context on this issue.

A major problem is that there are considerable differences in the formal national obligations with regard to public participation (e.g. different forms of public involvement). Countries may want to investigate to what extent it is beneficial to harmonize their provisions on public participation. As long as there is no harmonization, it could be laid down that the procedure of the Party of origin should broadly be followed.

Another issue is how the public of the affected Party is informed. This could be done either according to the rules of the Party of origin or to the rules of the affected Party.

The following step would be to identify the authority which will be responsible for informing the public of the affected Party. A second point is the way in which the comments of the public of the affected Party will be submitted to the competent authority of the country of origin. There are various options:

- (i) The responsibility for informing the public of the affected country is with the authority (competent authority or the proponent) in the Party of origin;
- (ii) The responsibility is with an authority of the affected Party (contact point);
- (iii) There is a shared responsibility between authorities in both countries.

The advantage of the first option is that the information can be provided directly to the public, that the comments can be sent directly to the country of origin and that delays can be avoided.

The advantage of the second option is that the authority of the affected Party is well informed of the ways and means of publishing and making available the EIA documents for public inspection, etc. A drawback could be the delays, especially when the comments of the public are first sent to the authority in the affected Party.

The advantages of both alternatives could be combined by sharing the responsibility between the authorities in both countries.

Although public hearings are not explicitly mentioned in the Convention with regard to public participation, several countries use public hearings as a form of public participation. The question then arises of whether public hearings should be held in the Party of origin or in the affected Party. Under bilateral or multilateral arrangements the Party of origin could hold a public hearing in the territory of the affected Party. Alternatively, it could be preferable to organize the public hearing in the Party of origin, providing the participants from abroad, where necessary, with the services of an interpreter.

In some countries affected individuals of the affected Party are given the right to appeal (see also section H below) against the decision. This information could be given either in the publication announcing the public hearing, in a special information brochure or in the decision.

G. Consultations between the Parties

Article 5 of the Convention provides that after the completion of the EIA documentation the Party of origin shall enter into consultations with the affected Party. It is not stated, however, at which level such consultations shall take place.

In general official consultations are usually at the highest level because they take place between States. Who finally takes part is up to the respective States to decide. It could, for example, already be indicated in the reply to the request for consultations.

Regarding the subject of consultations, Article 5 of the Convention already mentions some issues. There can, of course, be more subjects, depending on the situation. It seems likely that the country that asks for consultations also proposes some items that should be discussed (e.g. monitoring, post-project analysis) and that the other country in answering to the request also proposes some.

In accordance with the provisions of the Convention, the consultations take place before the final decision is taken in order to take into account the outcome of the consultations.

Article 5 provides that at the beginning of the consultations a reasonable time-frame should be set for the duration of the consultations. A possible way could be to try to agree on a case-by-case basis on the time-frame within which the consultations should be finished. If there is no agreement on a reasonable time-frame, a provision could be included in the arrangement stating that after a certain time (for example six to eight weeks) consultations end automatically, regardless of whether there is a satisfactory outcome. After that the EIA procedure continues and the decision can be taken.

In many cases it may be useful and even essential to meet more often and to exchange information at an expert level. The Parties should be able to ask for such an expert exchange whenever there is a need for it. As already indicated above and according to Article 3, paragraph 6, it is possible to meet and exchange information about the affected environment in the affected country for the preparation of the documentation. Another possibility is to meet at the level of an existing joint body.

H. Decision

Often the question is raised of how the comments of the authorities and the public of the affected country are taken into account. According to the Convention (Art. 6) due account has to be taken of the outcome of the EIA, including the documentation, as well as the comments thereon received and the outcome of the consultations. How this is done in detail is up to the different national systems to decide. At least it means that the comments of the authorities and the public of the affected country and the outcome of the consultations are taken into consideration in the same way as the comments from the authorities and the public of the Party of origin.

The Party of origin has to provide the final decision with the reasons and considerations to the affected Party. These could, in the spirit of the Convention, also reflect the impact on the affected country. For the dissemination of the decision to the relevant bodies of the affected country or for giving information on the decision to the public, the contact point could again be useful. The competent authority of the country of origin can also be

responsible for publicizing the decision in the affected country. In a bilateral or multilateral agreement this could be dealt with in detail, e.g. in the same way as is done with the publication of the EIA documents.

As mentioned in section F above, in some countries the affected individuals of the affected Party have the right to appeal against the decision in the Party of origin. The information about such a right of appeal could be given in the decision.

I. Post-project analysis

Article 7 of the Convention stipulates that the concerned Parties, at the request of any such Party, shall determine whether, and if so to what extent, a post-project analysis shall be carried out, taking into account the likely significant adverse transboundary impact of the activity for which an EIA has been undertaken pursuant to the Convention.

As mentioned in Appendix V to the Convention, the objectives of post-project analysis are monitoring compliance with the conditions as set out in the approval of the activity, reviewing an impact for proper management and in order to cope with uncertainties and verifying past predictions in order to transfer experience to future activities of the same type.

The requirements in the national legislation on postproject analysis vary considerably. In a limited number of countries it is mandatory to undertake post-project analysis as part of the EIA and the decision-making process.

In bilateral or multilateral arrangements countries could try to agree on the range of projects to which the post-project analysis should apply and on how to perform it. It could also be possible to determine the role of the affected Party in carrying out the post-project analysis, the responsibility for the post-project analysis, how to inform the affected Party of the outcome, and the question of whether the public will be informed. Alternatively, these aspects could also be decided on a case-by-case basis by the concerned Parties.

J. Dispute prevention and settlement

A special case of dispute settlement is dealt with in Article 3, paragraph 7. It provides for a dispute prevention and settlement procedure in cases where the Parties have different views about whether there will be a significant adverse transboundary impact (exchange of information and discussions and the use of an inquiry commission).

The Convention also contains a general provision, in Article 15, on dispute settlement which mentions as a means of such settlement: (i) negotiations (para. 1); (ii) arbitration (para. 2 (b)); (iii) the International Court of Justice (para. 2 (a)). Furthermore, Article 15, paragraph 1, refers to the possibility for Parties to use "any other method of dispute settlement acceptable to the parties to the dispute".

Some of these mechanisms may require considerable time. For example, arbitration according to Appendix VII or the submission of the case to the International Court of Justice may be very time-consuming. Article 15, paragraph 1, of the Convention also makes it possible to try to find quicker mechanisms than those provided for in the Convention.

One could, for example, think of situations where either the submitted documents are insufficient or the summaries of certain documents do not provide the necessary information, or documents arrive too late for making comments. The first aim should be to settle problems with the interpretation of the Convention or the bilateral agreement in the most appropriate way and at the most appropriate level. Maybe another informal expert exchange can clarify the situation. In any case either country should be able to take the initiative and make a proposal as it sees fit for reaching a solution which is satisfactory to both countries. It is also possible to use the consultation process for settling problems. If these quicker or more immediate mechanisms do not work, the mechanisms of the Convention for dispute settlement can still be used.

K. Joint EIA

Regarding transboundary EIA, there are cases where the project itself actually straddles the border (e.g. highways, railroads, waterways). In that situation either of the concerned Parties is at the same time Party of origin and affected Party.

In those cases a new form of EIA cooperation and coordination should be developed, because the question arises of which of the EIA procedures is applicable.

Is there a need to identify the applicable procedure or a need for a new joint procedure? In answering that question the flexibility of each national system has to be investigated. Also, it has to be decided which steps really need joint action, while the rest can be done according to either national system.

The use of a joint body may be helpful in such cases. Nevertheless, it should be kept in mind that both countries still need to make their own final decision. These decisions, however, should be harmonized or be coordinated with respect to time and content, based on the same result of the EIA. This would also save resources.

One possible solution could be to follow the most farreaching national system in the steps that will be taken jointly. Another possibility is to develop a new joint EIA procedure and formulate this in a bilateral agreement especially concluded for this purpose. An important point in that respect is that the preparation and respective decision-making processes should take place simultaneously.

L. Translation

In many cases, language differences between concerned Parties may cause problems in transboundary EIAs. Evidently, it is important that both the authorities and the public in the affected Party understand the information transmitted by the Party of origin, as well as the proceedings of public hearings in that country. On the other hand, due to the cost of translation it may be possible to distinguish between documents requiring translation and other documents which need not be translated.

The report of the task force on legal and administrative aspects deals with the issue of translation in detail (see part two above). Especially concerning the question of which of the documents need to be translated and which part of the contents has to be translated, the report gives a good overview (e.g. the extent to which the comments of the affected country have to be translated). The bilateral or multilateral arrangement could specify which documents should be translated.

Very often the question is raised of who is responsible for translations and who pays for them. The task force report states that the responsibility mainly is with the Party of origin, which should also pay for translations. Concerning the quality of translations, the task force referred to the possibility of establishing or authorizing organizations to translate and to guarantee professional standards. In bilateral or multilateral agreements countries could make detailed arrangements making use of the results of the work of the task force.

As an alternative, the concerned Parties may also jointly establish or authorize organizations to translate the relevant documents. This will require a consensus on the mode of financing those organizations, etc. Such organizations could also be given the responsibility of guaranteeing the quality of translations.

Practice has shown that in many cases additional time is needed for the translation of the respective documents and their transmittal to the other country. That means that in a bilateral or multilateral context solutions should be found to this problem. Either the documents should be translated before they are transmitted or the respective national time-frames should be extended for this purpose.

For some situations like consultations or public hearings on the territory of the affected Party, interpretation has to be provided. For instance, the country which hosts the consultations or which leads the public hearing could also provide for interpretation. Alternatively it could always be the responsibility of the Party of origin.

M. Financial aspects

The application of the Convention has several financial implications. The question of who pays for the translation of the various EIA documents and the comments thereon has already been mentioned. Furthermore, there are a number of procedural steps with financial implications (e.g. publication in the mass media in the affected country and presentation of the documentation for public inspection, public hearings, interpreters). Countries may wish to conclude explicit agreements on these financial aspects. A detailed list of costs could be drawn up on a bilateral or multilateral basis, indicating who will be paying for which element.

The task force on legal and administrative tasks formulated as a general rule that the Party of origin should be responsible for the procedural costs, because it would be easier for this Party than for the affected Party to recover the costs from the proponent. Financing of additional costs such as external expert opinions could, as a rule, best be paid by the one who asks for it.

N. Concluding remarks

Practice has shown that, although the Convention does not require such arrangements for its application, ratification, or entry into force, bilateral or multilateral arrangements on how to apply the provisions of the Convention in practice could prove useful. In the foregoing sections some key elements have been listed for inclusion in such bilateral and multilateral arrangements. Based on mutual trust and the principle of reciprocity, bilateral or multilateral arrangements could be developed to ensure the most effective application of the Convention and of the Resolution on EIA in a Transboundary Context, which states that the Signatories resolve to seek to implement the Convention to the maximum extent possible pending its entry into force. In a later stage these arrangements could be formalized if the countries involved wish to do so, taking into account the practical experience and the lessons learned.

Annex

Key elements for an agreement on transboundary EIA between Austria and Slovakia

I) EXAMPLE 1: COUNTRY OF ORIGIN = SLOVAKIA AFFECTED COUNTRY = AUSTRIA

(Arts. 25 to 34 of the Slovak EIA Act provide for transboundary EIA)

- Start = Notification to Austria (Art. 26, para. 2, of the Slovak EIA Act):
- --Slovakia notifies Austria immediately after the submission of the plan of the project by the applicant to the Slovak Ministry of the Environment (Art. 26, para. 2, of the Slovak EIA Act).
- —Contact point in Austria is the Federal Ministry of Environment, Youth and Family Affairs. The Ministry transmits the documents to the competent authority.
- 2) Content of the notification:
- -Letter of notification.
- —The Slovak Ministry of the Environment submits the whole plan of the project in Slovak, and the following parts of Annex 2 to the Slovak EIA Act in German: from item II subparas. 2, 4, 5, 6, 7, 8, 14, from item IV information concerning transboundary impacts, and item V (as appropriate).
- -Indication about the permits necessary for the activity.
- --Request, if there is a positive response from Austria, to submit information about the obvious environmental impact of the activity on Austrian territory.
- -Austria responds within four weeks if it wants to participate.
- —The full documents (except EIA concept as a whole and the maps of Annex 2, item V) are submitted in German (they are translated by the Slovak applicant).
- 3) Response: Austria participates
- —The Austrian Ministry of Environment, Youth and Family Affairs informs the Slovak Ministry of the Environment whether or not Austria intends to participate within four weeks. The reply should possibly already indicate which part of the environment will obviously be affected by the project (e.g. national parks . . .).
- After six weeks at the latest, information will be given on which federal provinces are involved and to which authority (e.g. competent provincial government or competent ministry) further information shall be submitted (department, contact person, telephone, fax . . .) and that the indicated authority is moreover the competent authority.
- —If Austria requires additional information (exceeding the extent of Art. 28 of the Slovak EIA Act), this should be requested in the response.
- —The time-frame for the comments of the public and the authorities is ten weeks from the submission of the plan of the project.
- -The Austrian response can be in German.

II) EXAMPLE 2: COUNTRY OF ORIGIN = AUSTRIA AFFECTED COUNTRY = SLOVAKIA

(Arts. 10, 17 of the Austrian EIA Act provide for transboundary EIA)

- Start = Notification to Slovakia (Art. 10, para. I, of the Austrian EIA Act):
- —Austria notifies Slovakia immediately after the applicant has submitted an outline of the project and the concept of the Environmental Impact Statement to the competent authority (Art. 4, para. 1, and Art. 10, para. 1, of the Austrian EIA Act).
- —Contact point in Slovakia is the Ministry of the Environment. In Austria the competent authority is either the respective provincial government or the competent Ministry. It notifies the Slovak Ministry directly.
- 2) Content of the notification:
- -Letter of notification.
- —Submission of the concept of the environmental impact statement (EIS) and all available information about transboundary impact.
- -Submission of an outline of the project.
- -Information about the course of the EIA procedure.
- —Request, if there is a positive response from Slovakia, to submit information about the obvious environmental impact of the project on Slovak territory.
- -Slovakia responds within four weeks if it wants to participate.
- —The general writing and all available information about transboundary impact is to be submitted in Slovak. The rest of the material is to be submitted in German.
- 3) Response: Slovakia participates
- —The Slovak Ministry of the Environment informs the Austrian Ministry of the Environment whether or not Slovakia intends to participate within four weeks. In the reply it informs Austria about the contact person (department, telephone, fax . . .).
- —The reply should possibly already indicate which parts of the environment will obviously be affected by the project (e.g. national parks . . .).
- —If Slovakia requires additional material, this should be requested in the response.
- —The time-frame for the comments of the public and the authorities is ten weeks starting from the submission of the EIS concept.
- —The Slovak response can be in Slovak.
- —Request to Slovakia to submit information on the environmental impacts (if these impacts are not yet sufficiently indicated in the first Slovak response) of the project on Slovak territory. The time-

- # Further information to Austria (Art. 28 of the Slovak EIA Act):
- -Further information on the EIA procedure is given to Austria.
- —Request to Austria to submit information on the environmental impacts (if these impacts are not yet sufficiently indicated in the first Austrian response) of the project on Austrian territory (Art. 28, para. 1 (c), of the Slovak EIA Act). The time-limit is six weeks starting from the receipt of the request. The requested information can be submitted in German.
- # General clause for the submission of additional information from Austria if it turns out later that additional information is necessary:

The Slovak Ministry of the Environment requests the competent Austrian authority to submit additional information within a time-frame indicated by Slovakia. The additional information may be submitted in German. If Austria does not respond within the given time, Slovakia continues the national procedure.

4) Documentation (Art. 29, para. 1, of the Slovak EIA Act):

[The Stovak EIS is done according to Annex 3 to the Slovak EIA Act. In case of transboundary impacts, information according to Annex 7 to the Slovak EIA Act (corresponds to Annex II Espoo Convention) is included. Nationally it is not yet defined to which extent the information according to Annex 7 will be given.]

- —The entire EIS according to Annex 3 (including an evaluation report) is submitted by the Slovak Ministry of the Environment to Austria (in Slovak) and the documentation according to Annex 7 (corresponds to Annex II to the Espoo Convention) is submitted in German
- —Slovakia indicates in German some possible dates for the public hearing and requests Austria to indicate when the public hearing will take place.
- —Austria will also be asked (in German) to indicate whether consultations (according to Art. 29, para. 2, of the Slovak EIA Act) should take place after the participation of the public.
- * Public Participation:

[According to Art. 18 of the Slovak EIA Act, the public can submit written comments concerning the EIS to the Ministry.

Art. 10, para. 5, of the Austrian EIA Act provides for public participation in Austria if Austria was notified and provided with documents by the Party of origin.]

- —The Austrian competent authority ensures the information of the public.
- —The documents are displayed and open for public inspection for six weeks. The comments will be collected by the provincial government and submitted to Slovakia (in German). A summary of the comments will be transmitted in Slovak.
- —In total there are ten weeks for the display of the documents, the collection of the comments, the drafting of a summary thereof in Slovak and the submission to Slovakia.

limit is six weeks from the receipt of the request. The requested information can be submitted in Slovak,

General clause for the submission of additional information from Slovakia if it turns out later that additional information is necessary:

The Austrian competent authority requests the Slovak Ministry of the Environment to submit additional information within a time-frame indicated by Austria. The additional information can be submitted in Slovak. If Slovakia does not respond within the given time, Austria continues the national procedure.

- Documentation (environmental impact statement, Arts. 6, 10, para. 1, of the Austrian EIA Act):
- —The entire EIS (according to Art. 6 of the Austrian EIA Act), including all information according to Annex II to the Espoo Convention, is submitted in German.
- —A summary of the EIS (Art. 6, para. 6, of the Austrian EIA Act) and a summary of the information given according to Annex II to the Convention are submitted in Slovak.
- —Stovakia will be asked (in Slovak) to indicate whether consultations should take place after the participation of the public.

* Public participation:

[In Austria after the application including the EIS has been filed, public participation takes place. According to the Espoo Convention (Art. 2, para. 6) the public of Slovakia has to be provided with equivalent rights.]

- —The Slovak Ministry of the Environment ensures the information of the public.
- —The documents will be displayed by the affected communities and are open for public inspection for six weeks. The comments will be collected and submitted to Austria in Slovak. A summary of the comments will be transmitted in German.
- —In total there are ten weeks for the display of the documents, the collection of the comments, the drafting of a summary thereof in German and the submission to Austria.
- Environmental impact expertise (Arts. 12, 10, para. 1, of the Austrian EIA Act):

[According to Art. 12 of the Austrian EIA Act, a comprehensive and overall environmental impact expertise (EIE) has to be worked out by experts on the basis of the EIS and expertise in relevant fields which inter alia shall assess the impacts, review the comments and contain a non-technical summary.]

- —The entire EIE is transmitted in German and a non-technical summary in Slovak.
- —Austria indicates in Slovak some possible dates for the public hearing and requests Slovakia to indicate when the public hearing will take place.
- Public participation:

[According to Art. 13, para. 2, of the Austrian EIA Act, the EIE has to be displayed for public inspection for at least 4 weeks at the district administrative authority and the affected community.]

- —The Slovak Ministry of the Environment immediately makes the EIE (including the non-technical summary in Slovak) available to the public and requests the affected communities to publish the summary immediately.
- —The EIE is open for public inspection at the Ministry of the Environment in Slovakia for four weeks.
- —At the same time the announcement for the public hearing done by the Ministry of the Environment could take place.

6) Public hearing:

[At this stage a public hearing takes place (there can be several hearings in different communities) in Slovakia conducted by the proponent. According to the Espoo Convention there also has to be a public hearing in Austria at this stage.

- → After the submission of the EIS to Austria ten weeks are provided for the comments of the public including their summary and their submission to Slovakia. During the same time the public hearing takes place and the minutes are submitted to Austria.]
- —A public hearing of Slovakia in Austria shall take place within six weeks from the receipt of the EIS. The competent Austrian authority shall send out the invitation for the public hearing (in German) at least two weeks earlier to the Slovak Ministry of the Environment.
- Austria, by way of administrative assistance, provides the premises and announces the date of the public hearing.
- —The public hearing is organized (convened, opened and closed) by the Austrian competent authority. It is chaired by the Slovak applicant.
- —Interpretation for the public hearing will be provided by the Slovak proponent.

Participants:

Słovakia:

- * applicant
- * Ministry of the Environment
- * EIA authority if it is not the Ministry of the Environment

Austria:

- * government of the affected province
- Ministry of the Environment
- * affected communities
- * public

Minutes:

- —The minutes are taken by the Slovak applicant.
- —The minutes are kept in Slovak and translated into German by the applicant.
- After three weeks at the latest the minutes are submitted to the competent Austrian authority.
- Uncertainties of the minutes are the subject of consultations.
- # General clause: If few people in Austria are affected they may be invited to participate in the public hearing in Slovakia.

7) Consultations:

- —As soon as possible and at the latest one week after the submission of the minutes of the public hearing, the Austrian Ministry of the Environment informs the Slovak Ministry of the Environment whether or not Austria intends to enter into consultations.
- —If the response is positive, Austria indicates which and how many participants will come and proposes items for the consultations.

6) Public hearing:

[According to Art. 14 of the Austrian EIA Act a public hearing about the project, its impacts and the EIE has to take place. According to the Espoo Convention a public hearing also has to take place for the Slovak public.

- ightarrow In Slovakia several hearings could also take place in different communities. The internal action is regulated by Slovakia.]
- —A public hearing of Austria in Slovakia shall take place within six weeks from the receipt of the EIE. The Slovak Ministry of the Environment shall send the invitation for the public hearing in Slovak to the competent Austrian authority (or the Ministry of the Environment) at least two weeks before it takes place.
- —Slovakia, by way of administrative assistance, provides the premises and announces the date of the public hearing.
- —The public hearing is organized (convened, opened and closed) by the Slovak Ministry of the Environment. It is chaired by the Austrian competent authority.
- Interpretation for the public hearing will be provided by the Austrian competent authority,

Participants:

Austria:

- competent authority
- Ministry of the Environment
- * applicant
- * experts
- * (cooperating authorities)

Slovakia:

- Ministry of the Environment
- * communities
- * public

Minutes:

- —The minutes are taken by the competent Austrian authority.
- —The minutes are kept in German and translated into Slovak by the competent Austrian authority.
- --After three weeks at the latest the minutes are submitted to the Slovak Ministry of the Environment.
- —The Slovak Ministry of the Environment ensures the information about the minutes of the public hearing by way of submission to the affected communities. These display the minutes at least for four weeks for public inspection (analogous to Art. 14, para. 6, of the Austrian EIA Act).
- -Uncertainties of the minutes are the subject of consultations.
- # General clause: If few people in Slovakia are affected they may be invited to participate in the public hearing in Austria.

7) Consultations:

- —As soon as possible and at the latest one week after the submission of the minutes of the public hearing, the Slovak Ministry of the Environment informs the Austrian competent authority whether or not Slovakia intends to enter into consultations.
- —If the response is positive, Slovakia indicates which and how many participants will come and proposes items for the consultations.

- —Slovakia issues the invitations to the consultations and sets the date.
- -Interpretation will be provided by Slovakia.

Participants:

Slovakia:

- Ministry of the Environment
- EIA authority if it is not the Ministry of the Environment
- * applicant
- * competent authority * competent ministry

Austria:

- * government of the affected province
- Ministry of the Environment
- * in some cases also other ministries

Content and objectives:

- —At the beginning of the consultations a time-frame is fixed. If there is no agreement on the time-frame, the consultations end after two months and the national procedure continues. The same applies if no solution acceptable to both sides can be reached during the given time.
- -Both points of view are explained.
- —The intention is to reach a solution acceptable to both sides and to draw up a common catalogue of measures.
- —Arrangements concerning post-project analysis and monitoring (e.g. who performs which kind of measurements and makes the results available to the other State).
- —Article 5 of the Espoo Convention provides for further possible items.
- —The minutes of the consultations are transmitted in Slovak at the request of Austria.
- # General clause that at any time discussions at expert level can take place if need be.

8) Expert opinion and final opinion:

[According to the Slovak EIA Act, as a result of the EIA on the initiative of the Ministry of the Environment, an expert opinion is formulated by ministerially designated experts on the basis of the EIS and comments of authorities and the public. On the basis of the expert opinion the Ministry of the Environment gives a final opinion concerning the project. The final opinion also includes statements concerning the Espoo documentation and the comments from the Austrian authorities and the public. It shall state whether, and, if so, under what conditions, the Ministry of the Environment recommends the activity (Arts. 20, 30 of the Slovak EIA Act).]

—After three weeks at the latest the final opinion is submitted in German to Austria.

9) Decision:

[The decisions are taken by the respective competent authorities taking into consideration the final opinion according to Art. 23 of the Slovak EIA Act. Subsequently, these decisions are to be transmitted to Austria (Art. 30, para. 2, of the Slovak EIA Act).]

- —Three weeks at the latest after the receipt of the final decision by the Slovak Ministry of the Environment the whole final decision including the reasons for the decision (in Slovak) will be transmitted to the Austrian Ministry of the Environment.
- —The relevant parts of the decision concerning transboundary impacts and further relevant parts for Austria (subjective selection by Slovakia) are transmitted in German.
- —After the submission, the Austrian competent authority informs the public and provides for adequate publication.
- # General clause concerning post-project analysis and monitoring: In the course of the consultations it will be laid down in which form post-project analysis and monitoring will be performed and which information will be transmitted.

- -Austria issues the invitations to the consultations and sets the date.
- —Interpretation will be provided by Austria.

Participants:

Austria:

* For Austria in any case the Ministry of the Environment and the competent authority will participate. The other participants are not yet fixed.

Slovakia:

* Who participates for Slovakia will be indicated in the response. In any case the Ministry of the Environment will participate.

Content and objectives:

- —At the beginning of the consultations a time-frame is fixed. If there is no agreement on the time-frame, the consultations end after two months and the national procedure continues. The same applies if no solution acceptable to both sides can be reached during the given time.
- -Both points of view are explained.
- —The intention is to reach a solution acceptable to both sides and to draw up a common catalogue of measures.
- Arrangements concerning post-project analysis and monitoring (e.g. who performs which kind of measurements and makes the results available to the other State).
- --Article 5 of the Espoo Convention provides for further possible items.
- —The minutes of the consultations are transmitted in German at the request of Slovakia.
- # General clause that at any time discussions at expert level can take place if need be.

9) Decision (Arts. 17, 10, para. 3, of the Austrian EIA Act):

[According to the Austrian EIA Act (Art. 17) there is only one decision taken by the competent authority taking into consideration the outcome of the EIA procedure including the EIS, EIE, submitted comments, the public hearing and the consultations.]

- —Three weeks after the decision is taken the whole decision is transmitted (in German) by the competent authority to the Slovak Ministry of the Environment.
- —The relevant parts of the decision concerning transboundary impacts and further relevant parts for Slovakia (subjective selection by Austria) are transmitted in Slovak,
- —If necessary the decision(s) on appeal(s) are transmitted entirely in German.
- —The relevant parts that have been changed on appeal are transmitted in Slovak.
- —After the submission of the decision the Slovak Ministry of the Environment informs the public and provides for adequate publication.
- # General clause concerning post-project analysis and monitoring:

In the course of the consultations it will be laid down in which form post-project analysis and monitoring will be performed and which information will be transmitted.



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