Sixth Framework Programme
Specific Targeted Research or Innovation Project

(IMP)3

Projects subject to EIA
D 2.4 Report WP 4

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IMProving the IMPlementation of Environmental IMPact Assessment

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FOREWORD

The project (IMP)3 – IMProving the IMPlementation of Environmental IMPact Assessment is carried out within the 6th framework programme investigating the application of the environmental impact assessment (EIA) in Europe. It ties in with the results of the report from the Commission to the European Parliament and the Council that revealed that there are still weaknesses as well as considerable variability in the Member States' implementation of the EIA-Directive.

(IMP)3 focuses on the improvement of the EIA-application concerning human health, risk assessment and project types subject to EIA. It was accompanied by an effective communication-process with DG Research and DG Environment. We would like to thank Marialuisa Tamborra, Laura Tabellini and David Aspinwall for their support.

The results of (IMP)3 are based on an investigation of the actual application of EIA in the European Member States surveyed by a questionnaire spread across European EIA-stakeholders and interviews in ten European countries. We would like to thank the 183 EIA-experts who returned the questionnaire and the 53 interviewees in Europe, USA and Canada for their support. Their valuable input forms the empirical data basis of our research.

(IMP)3 shall provide decision support to the policy making process on Community level and contribute to an improved knowledge basis on EIA application such as stimulate discussions within the European EIA community.

EXECUTIVE SUMMARY

Environmental Impact Assessment (EIA) has been variously described as:

> *"… In principle, EIA should lead to the abandonment of environmentally unacceptable actions and to the mitigation of the point of acceptability of the environmental effects of proposals which are approved" [Wood, 1995]*[1]
>
> *"... a process or set of activities designed to contribute pertinent environmental information to project or program decision-making" [Beanlands and Duinker, 1983]*[2]
>
> *"... a basic tool for the sound assessment of development proposals ... to determine the potential environmental, social and health effects of a proposed development" [Clark, 1983]*[3]

EIA is presented as a technique to improve the knowledge base for decision-making through a process of information generation related to the identification, prediction and assessment of the effects of project implementation. In recent years the role of EIA has been expanded to become increasingly integral to environmental planning and resource decision-making, rather than serving simply as a check upon them. EIA processes should supply decision makers with an indication of the likely consequences of their actions. EIA can also be seen as a management tool, that takes place in a political context where outcomes of decisions are often reached through a long-term process that involves trade-offs, compromises and stakeholder interactions. This applies to every decision-making level and may also contribute to the largely varying ways of transposing the EIA Directive's requirements into the Member States' regulations.

As required by the objectives of the 6th Framework programme of the European Commission (Area 8.1. for research to support policies), the overall objective of this study was to contribute to an advanced knowledge base considering how to achieve an enhanced application of the EIA Directive's Annexes in terms of a consistent coverage of project types with likely significant effects across the EU Member States. It should be noted that research undertaken in this study was mainly focused on impact assessment as a management tool to support policy making rather than on technical details of scientific based suggestions for changing thresholds/criteria and/or definitions.

The research activity encompassed a literature review, a comparative survey of other related EU Directives such as national/regional regulations with regard to projects subject to EIA and the various screening procedures applied. Moreover, it comprised a questionnaire to MS experts for the EU 25 and more detailed interviews in 10 selected European countries and two non-EU countries.

However, the questionnaire survey and interviews could not provide enough statistically significant results to arrive at assured conclusions, mainly due to the rather small sample size of responses. Thus the results only give an impression of the views of stakeholders, that are pro-actively interested in contributing to the enhancement of the EIA-application. Nevertheless, some

1 Wood C. (1995): *Environment Impact Assessment – A comparative review.* Longman, Scientific & Technical, Essex, 1.

2 Beanlands, G.E. and P.N. Duinker. 1983. *An Ecological Framework for Environmental Impact Assessment in Canada*. Halifax, NS: Institute for Environmental Studies, Dalhousie University and FEARO.

3 Clark, B.D. 1983. *EIA manuals: general objectives and the PADL manual*, in PADL, EIA and Planning Unit (ed.) Environmental Impact Assessment. Martinus Nijhoff: The Hague, 149-164.

correlation between the answers could be identified showing similar concerns. The main issues of concern could be summarized as follows:

- Diverging levels of environmental protection due to the present disparities in screening procedures among MSs;
- Ambiguous screening procedures, found in a number of cases (lack of transparency in screening decisions, lack of robust selection criteria);
- Interpretational problems with certain terms and project type descriptions;
- Demand for adequate reference to the actual impacts on the environment in setting thresholds values; and
- Problems in dealing with cumulative effects.

Furthermore, it was possible to show similarities in the responses regarding potential solutions to tackle identified weaknesses such as:

- Specification of selection criteria for screening and clearer advice for practical application;
- General case-by-case analysis with robust selection criteria rather than setting fixed threshold values (corresponding to “salami-slicing”, developers’ tendency to stay just below value, etc.);
- Reducing overlaps in licensing procedures through enhanced co-ordination with other related Directives;
- Providing more specific guidance;
- Knowledge sharing for good practice; and
- SEA expected to become a helpful tool to tackle some of the mentioned problems and unburden EIA.

Drawing on the findings of the research, questionnaire and interview survey, recommendations for the range of actions that the European Commission could take to improve the implementation of EIA with regard to project types subjected to EIA are to be found in the formulation of different policy options, which may be characterized as follows:

- they follow a line from “zero action/do nothing” to an extreme option equivalent of a “radical change” to the Directive;
- the trend of increasing potential actions described in the policy options should be seen as interrelated to a time factor starting with short term activity moving to long term changes;
- each option contains a combination of supportive and regulative measures as potential examples of actions; and
- various combinations are possible and more than likely useful.

It is noteworthy that, before taking up any suggested action, the actual need for supportive and/or regulative measures and the targeted outcome should be considered carefully. This study offers some advice in this field by performing a SWOT-Analysis for each of the suggested policy options. Further research would be needed to underpin the need for certain actions combined with an analysis of parallel ongoing studies in terms of how the identified issues of concern could be

efficiently solved. Only through the creation of an assured knowledge base for the necessary measures to implement, might an enhancement of the application of the EIA Directive be obtained.

In the short term, some weak points of European practice in the use of EIA could be tackled with non-legislative actions, such as greater diffusion of good practice, better provision and use of EIA guidance, better focused EIA research and the strengthening of provision for EIA training.

In due course, a well justified amendment of the EIA Directive could be necessary to further support the successful application of EIA in Europe.

1 CONTEXT OF THE STUDY

The development of projects, as e.g. the construction of main roads and railway-lines, the development of industrial plants, shopping centres and theme parks, etc. can cause adverse effects to the environment. Therefore the European Union has enacted the EIA-Directive (Directive 85/337/EEC) to perform an assessment of the environmental effects of those projects which are likely to have significant effects on the environment (environmental impact assessment – EIA).

The EIA Directive has been in place for almost 20 years. A report of the Commission to the European Parliament and the Council evaluated its application and effectiveness and revealed that there are still weaknesses as well as considerable variability in the Member States' implementation.[4] As a result the Commission aimed for a deeper evaluation of problematic aspects of the EIA Directive and launched a project within the 6th framework programme.

The project IMProving the IMPlementation of Environmental IMPact Assessment – (IMP)3 is based on the results of the report from the Commission to the European Parliament and the Council on the application and effectiveness of the EIA Directive. Concentrating on some of the weak points the report outlined, (IMP)3 focuses on three main objectives:

- Objective A: a better incorporation of human health aspects into EIA;
- Objective B: a better integration and more consistency of risk assessments, regarding various sources of risks (natural hazards, accidents, sabotage); and
- Objective C: a survey of project types subject to EIA particularly focusing on various screening methods, different sets of project types and threshold values/criteria applied.

The study of (IMP)3 was carried out by an international and interdisciplinary team, consisting of members from the following institutions:

- ÖIR – Österreichisches Institut für Raumplanung (Austrian Institute for Regional Studies and Spatial Planning); Austria
- UBA – Umweltbundesamt (Federal Environment Agency); Austria
- WCH – Wales Centre for Health; United Kingdom
- Nordregio – Nordic Centre for Spatial Development; Sweden
- CITTA – Research Centre for Territory, Transports and Environment at the Faculdade de Engenharia da Universidade do Porto; Portugal
- SZAP – Slovakia Slovenská Agentúra Životného Prostredia (Slovak Environmental Agency)

(IMP)3 shall provide an important input to the process of improving the application of EIA, also considering potential amendments to the EIA Directive and aims to stimulate discussions within the European EIA community. The suggestions for potential steps to be taken are primarily addressed to the European Commission.

[4] Report from the Commission to the European Parliament and the Council on the application and effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC). How successful are the Member States in implementing the EIA Directive.

1.1 General concept for projects subject to EIA

The EIA Directive requires Member States to carry out environmental impact assessments (EIA) on certain public and private projects, before they are authorized, where it is believed that the projects are likely to have a significant impact on the environment. For some projects, such as construction of motorways, airfields and nuclear power stations listed in Annex I to the Directive, such assessments are obligatory. For others, such as urban development projects, tourism and leisure activities, listed in Annex II, Member States must operate a screening system to determine which projects require assessment. They can apply thresholds or criteria, carry out case-by-case examination or use a combination of these screening instruments, the aim being to ensure that all projects with likely significant impact on the environment are assessed.

The objective of an EIA is to identify and describe the environmental impacts of projects and to assess whether prevention or mitigation is appropriate. During the EIA procedure, the public can provide input and express environmental concerns with regard to the project. The results of this consultation must be taken into account during the authorization process.

1.1.1 Objectives and Task of WP 4

The 5-year-review of the Directive's implementation from the Commission analyzed a wide variation of thresholds set in the different countries of the European Union. Furthermore the implementation approaches with either mandatory EIA thresholds for each project category or the differentiation between Annex I and II projects according to the Directive vary largely.

Some key issues turned out to be problematic with implementing the Directive's Annexes:

- Whether the existing system with fixed criteria for Annex I project types provides the right trigger to cover all projects with likely significant effects on the environment and if so, whether or not all thresholds are set at the right level;
- Definitions of project types, whether or not they are clearly interpretable in all cases;
- The unsystematic "screening" of Annex II projects, i.e. categories of projects that have to undergo an EIA if they are likely to have a significant impact on the environment;
- Wide variation between Member States in the criteria for "screening". This means that a certain project would be subject to an EIA in one Member State but not in another; and
- The list of project types, whether any important categories are missing or others should be removed.

In order to achieve an equal knowledge basis the report "Projects subject to EIA" addressed the following major issues:

1. Research on the relationship of Annex I+II investigating different implementation methods;
2. Acquisition of information regarding Annex I thresholds and criteria and project type descriptions; and
3. Investigation of the project list whether all categories with likely significant effects are on target of the Directive such as a comparison with project lists in other related directives.

Based on the analysis of the questionnaire and interview protocols such as investigation results, strengths and weaknesses of different policy options were discussed, especially with regard to reaching a balanced treatment of projects and assessment of their environmental relevance across the EU.

For Annex I project categories comparative research on the definitions and thresholds has been made. The results are provided in Annex 1 of this report.

1.1.2 Definitions

Project[5] means

…for the purposes of the EIA Directive:

- the execution of construction works or of other installations or schemes; and
- other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources.

…for the purposes of the IPPC Directive:

- Industrial activities with a certain production capacity or output.

…for the purposes of the SEVESO II Directive:

- the operation of any establishment covered by this Directive, leading to serious danger to human health and/or the environment;
- certain industrial activities; and
- industrial chemical processes which involve dangerous substance.

…for the purposes of the Habitats Directive:

- Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.

'Threshold' means:

A point of beginning a minimum requirement for further action.

'Criteria' means:

Standards on which a judgement or decision can be based.

[5] The word '**project'** comes from the Latin word projectum from projicere, "to throw something forwards" which in turn comes from pro-, which denotes something that precedes the action of the next part of the word in time (paralleling the Greek πρό) and jacere, "to throw". The word "project" thus actually originally meant "something that comes before anything else is done". When the word was initially adopted, it referred to a plan of something, not to the act of actually carrying this plan out. Something performed in accordance with a project was called an object. An object in this meaning is the same thing as an objective or task. It comes from old project terminology and refers to the act of actually performing something according to a plan, or rather "according to a project".

'**Screening**' means:

A systematic examination or assessment in order to identify particular characteristics.

'**Cumulative impact**' means:

'Cumulative impact' is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what actor undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

'**Effects'** include:

(a) Direct effects, which are caused by the action and occur at the same time and place; and

(b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts are used synonymous in this study.

'**Tiering**' means:

"Tiering" refers to the coverage of general matters in broader environmental impact statements with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

(a) From a program, plan, or policy environmental impact statement to an analysis of lesser scope or to a site- specific statement or analysis.

(b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

1.2 Methodology

1.2.1 The "triangle-approach" of (IMP)3

Research on the improvement of the application of EIA needs a sound literature review, also including existing evaluation reports and different types of national legislation as well as a sufficient communication with EIA-stakeholders and applicants in Europe and with EIA-experts at the European level.

Even if the investigation of the three core fields of research conducted in (IMP)3 (human health, risk assessment and projects subject to EIA) requires the analysis of rather different sources in

order to meet the needs of the feature of each thematic field, all three are dealing with the application of EIA in Europe.

For gathering the data required from various sources, a kind of “triangle-approach” was developed. The literature review forms the basis of the “research triangle”, whereas both sides cover the communication-tools with the EIA-applicants in Europe: on one side a questionnaire has been distributed to about 970 EIA-stakeholders and on the other side interviews have been conducted with 64 selected EIA-experts.

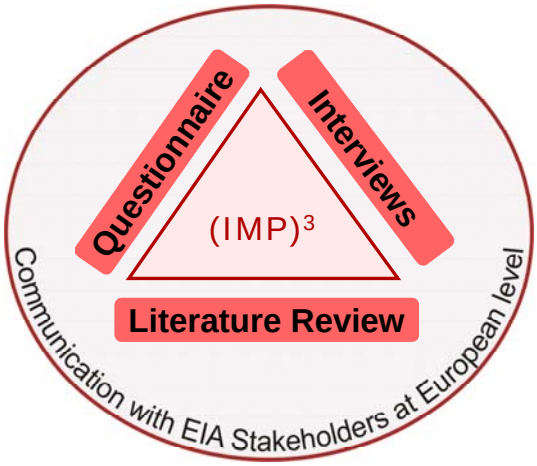

Figure 1 (IMP)3 “triangle-approach” for gathering and analysing data

Consequently, (IMP)3 deals with three different types of data available:

- qualitative data concerning the legal basis and the relevant discussions in the scientific world of EIA policy and application as laid down in the **literature**;
- quantitative data about the actual application of EIA in the EU Member States deriving from the analysis of the **questionnaire**; and
- qualitative data about the estimation of the strong and weak points of EIA-application in selected European countries gained from the analysis of the **interviews** conducted.

In addition to the analysis of the relevant sources and data, a communication-strategy with relevant stakeholders on EU-level was set up (see chapter 1.2.4).

1.2.1.1 Literature review

The literature review covers the existing relevant literature including the main documents at European level and selected national laws concerning the application of EIA. The results of the research are presented in chapter 2.

1.2.1.2 Questionnaire

Types of EIA-stakeholders

The questionnaire and the interviews aimed to provide an overview of the experience of the actual EIA-applicants in Europe in terms of human health, risk assessment and EIA project types.

Therefore (IMP)3 not only addressed the administrative staff at the national level who is dealing with EIAs. Moreover, it addressed the very basis of the EIA-applications including consultants and NGOs. So it was necessary to involve a broad spectrum of representatives of different types of stakeholders. The different EIA-stakeholder-groups addressed are:

- representatives of national governments,
- regional bodies with competence in EIA-issues,
- NGO's,
- representatives of the private sector as e.g. consultants,
- others as e.g. researchers.

Database: stakeholder list

A list of EIA-stakeholders in the European Member States served as a database for the distribution of the questionnaire and the selection of the interview-partners. The list was established by the use of the expert-network of the (IMP)3-team members with the support of members of the EIA/SEA expert group.

All in all, 970 EIA-stakeholders have been selected representing the different types of stakeholders. However, in statistical terms they do not represent a random sample of all actors being involved in EIA issues throughout Europe, moreover it is a list of experts directly dealing with the application of EIAs.

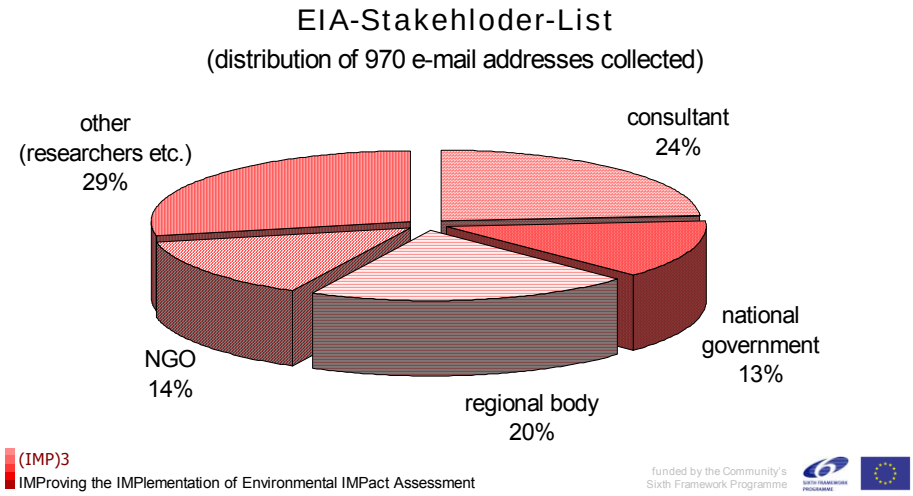

Figure 2 Types of EIA-stakeholders covered by the stakeholder list

As most of the stakeholders are practitioners, their answers mirror the method of actual application of the EU EIA Directive that is implemented in national and regional legislation throughout the EU Member States.

Thus the empirical results derived from this data source are based on personal perceptions of the EIA-stakeholders and are mainly valid for the empirical sample of (IMP)3. They give indications to actual EIA practices and cannot be generalized. Nevertheless, the different approaches of the

various stakeholder groups show a picture that does not only reflect the administrative point of view, but also the views of practical experience.

Development and distribution of the questionnaire

As the aim of the questionnaire was to get a broad view of the situation in Europe and due to the limited time of practitioners to complete the questionnaire, it had to be kept short and simple. So it focused mainly on multiple choice answers, usually combined with one additional open question at the end. The questionnaire was developed by an interactive process between all partners of the (IMP)3-team in close collaboration with representatives of DG Environment.

Based on the list of EIA-stakeholders, the questionnaire was disseminated via e-mail to 970 addresses. The questionnaire was attached to a covering letter prepared in eleven languages (English, Czech, Finnish, French, German, Hungarian, Polish, Portuguese, Slovak, Spanish and Swedish).

Return rates

Within the first two weeks after distributing the questionnaire, 106 completed questionnaires have been returned. After a second reminder another 77 were transmitted. So, all in all, the analysis of (IMP)3 is based on 183 completed questionnaires, bringing the return rate to 19%.

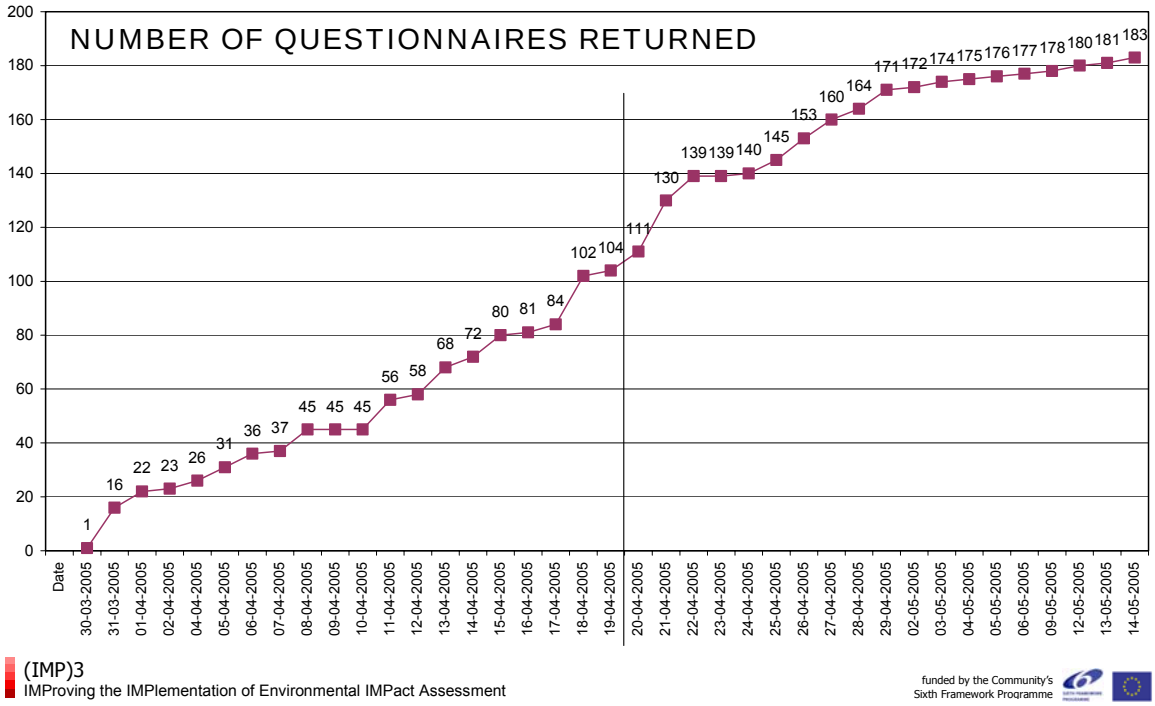

Figure 3 Time response of questionnaires returned

Represented countries

According to the response rate, the numbers of respondents from each Member State vary largely. Most questionnaires were returned from Slovakia (33 respondents), the UK (22), followed by Germany (12) Austria (11) and Sweden (11). So 30% of respondents come from just two countries (18% from Slovakia and 12% from the UK).

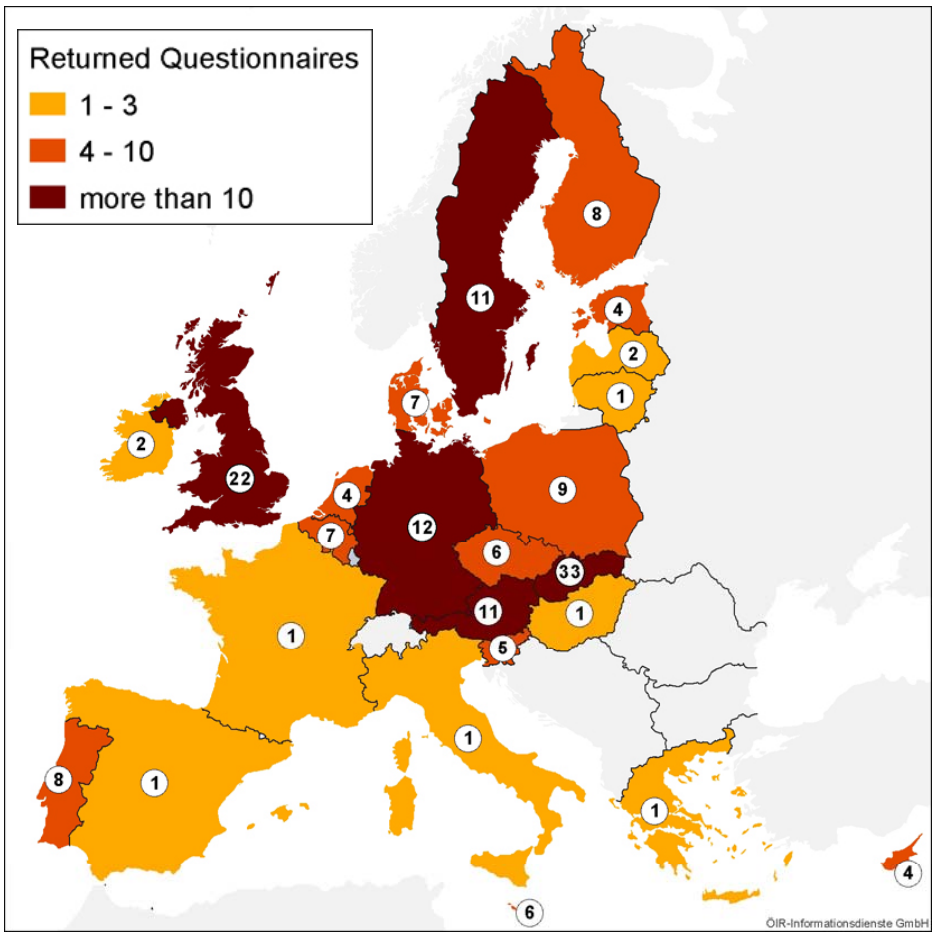

Figure 4 Geographical distribution of questionnaires returned

From some Member States just one completed questionnaire has been returned (Estonia, France, Greece, Hungary, Italy, Lithuania) and there was no response from Luxemburg. Therefore Slovakia and the UK are four and three times 'over-represented' in terms of respondents while Estonia, France, Greece, Hungary, Italy, Lithuania, Ireland, Luxembourg and Latvia are 'under-represented' by a similar factor.

Statistical analysis – response rates per country	
Total no. of questionnaire respondents	183
Mean no. of respondents per country	7
Median no. of respondents per country	6
Mode	1
Range	min=0 max=33

Figure 5 Statistical analysis – response rates per country

Consequently, the feedback cannot be interpreted as a representative random sample of stakeholders across the EU. Therefore, a country-by-country analysis is not possible especially for the under-represented Member States. Furthermore, no calculation of any numerical results beyond the analysis of frequencies and percentages is made, and verbal descriptions are mainly used. No further statistical processing of empirical data such as average values is done. However, the database gives an impression of the view of stakeholders, that are pro-actively interested in contributing to the development of the EIA-legislation.

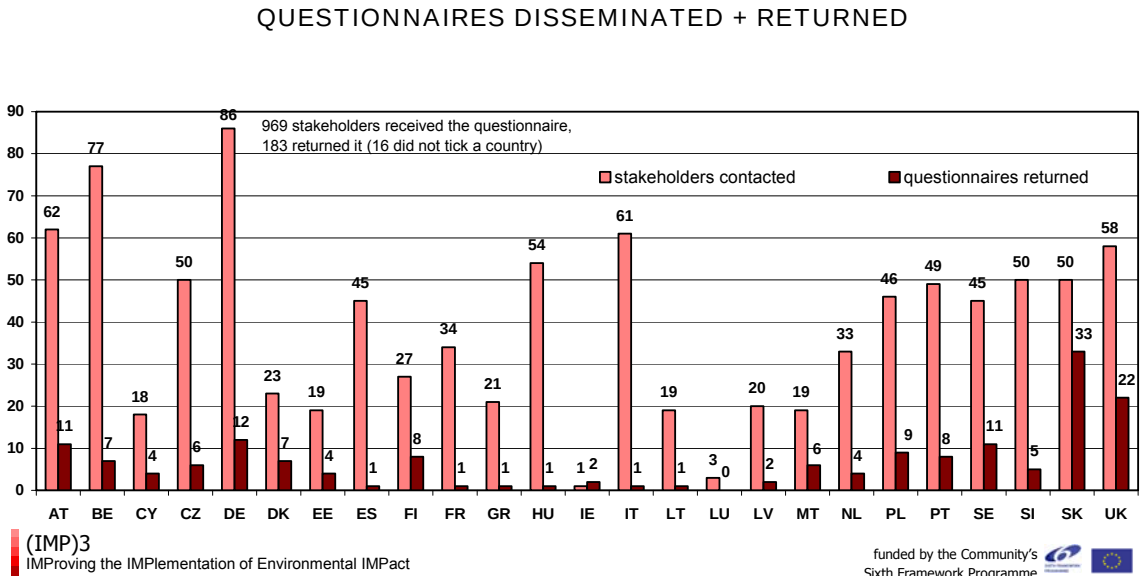

Figure 6 Questionnaires disseminated and returned

Represented stakeholder groups

The questionnaires returned covered answers of all different stakeholder groups. The smallest group amongst the respondents are NGO's (12 respondents/6.6%), whereas the largest group are the consultants (68 respondents/37.2%). The administrative view on EIA-application (representatives from regional governments resp. national governments) is covered by 58 respondents (31.6%).

Statistical analysis – response rates per stakeholder group	
Total no. of questionnaire respondents	183
Mean no. of respondents per stakeholder group	26
Median no. of respondents per stakeholder group	26
Mode	29
Range	min=1 Max.=68

Figure 7 Statistical analysis – response rates per country

The comparison of the frequency distribution of the stakeholders contacted with the frequency distribution of the stakeholders who answered, the business sector (consultants) is over-represented whereas the NGO's are under-represented. However, as the database was not a

random sample of EIA stakeholders across the EU, statistical analysis and interpretations going beyond a calculation of frequencies and percentages were avoided.

stakeholders contacted via questionnaires and stakeholders who answered

	stakeholders contacted		stakeholders answered	
stakeholder type	number	percent	number	percent
National government	128	13.2%	29	15.8%
Regional government	200	20.6%	29	15.8%
NGO	144	14.8%	12	6.6%
consultants	226	23.3%	68	37.2%
scientists and other proponents	272	28.0%	45	24.6%
Total	970	100.0%	183	100.0%

Figure 8 Stakeholders contacted via questionnaires and stakeholders who answered

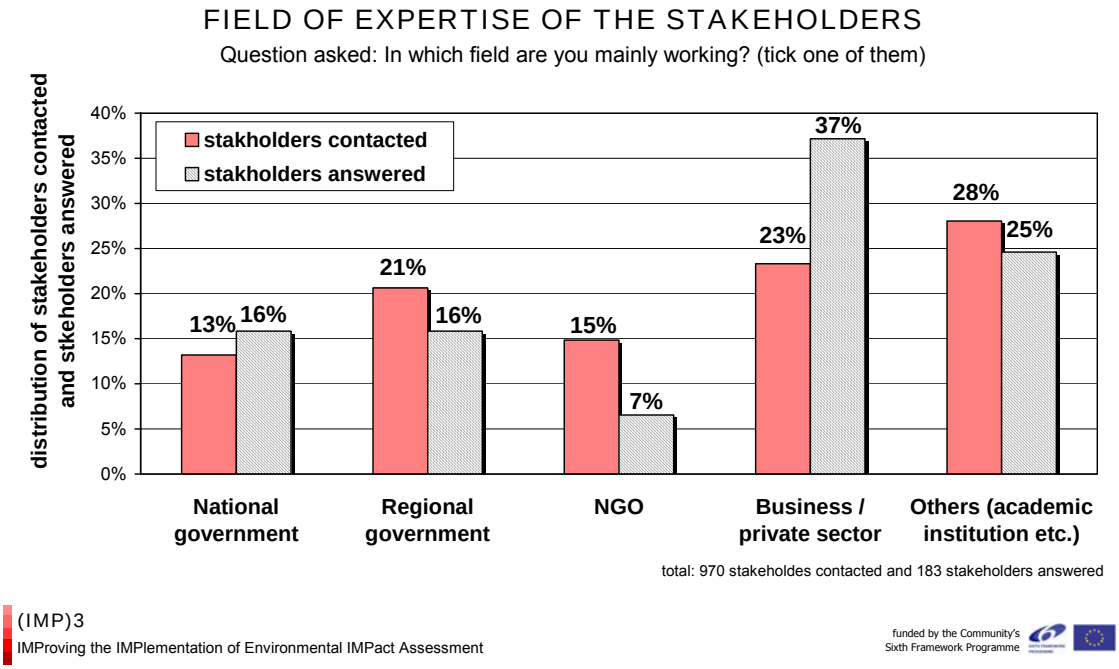

Figure 9 Field of expertise of the stakeholders

Role of the stakeholders in the EIA-process

The stakeholders responding to the questionnaire are involved in the EIA-process from very different sides[6]: 75 respondents are writing or preparing environmental impact statements (EIS) for the developer and another 16 are involved in the development of projects, both groups mirroring their experience with EIAs mainly from the proponents' side.

6 As one person can be involved in the EIA-process in different roles, more than one answer was allowed. So the sum of the options ticked (278) outweighs the number of questionnaires returned (183).

59 persons are reviewing submitted EISs and providing expert opinions/comments on EIS, additionally 37 ticked the category “dealing with EIA as regulatory authority”. Both groups represent the views from the administrative side.

Nine respondents to the questionnaire were involved in EIAs representing the position of a NGO. 36 are concerned with EIA from a scientific side (e.g. researcher, scientist, academic teacher).

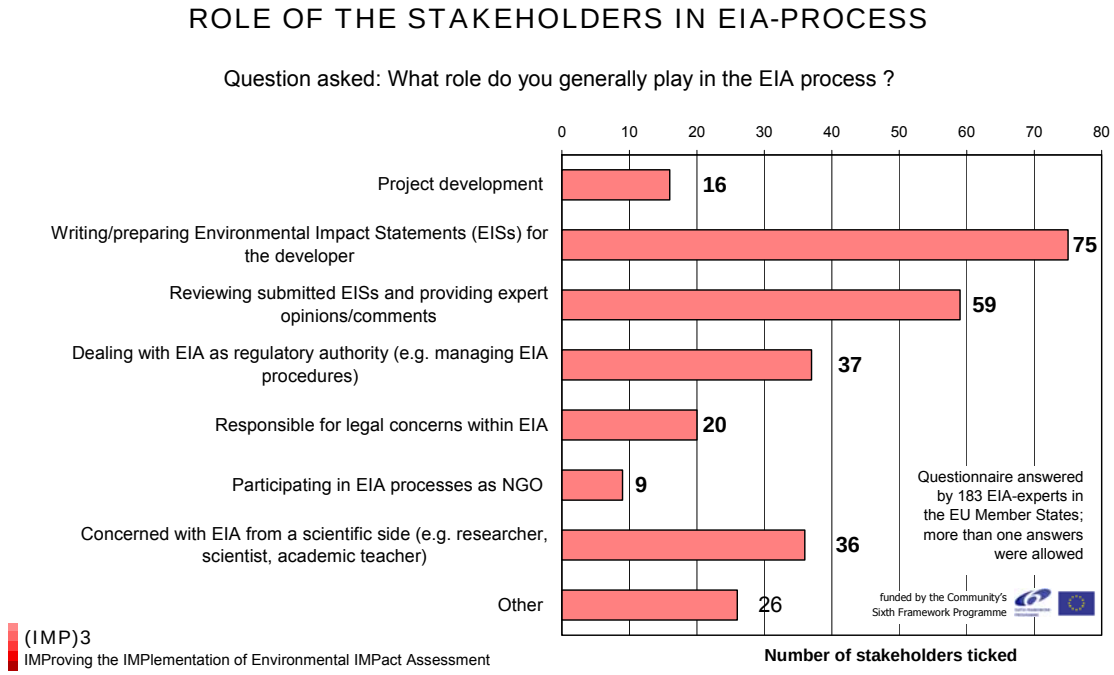

Figure 10 Role of the stakeholders in the EIA-process

Statistical analysis – “Role of the stakeholders in EIA-process”	
Total no. of questionnaire respondents	183
Total no. of answers ticked	278
Mean no. of respondents per stakeholder group	35
Median no. of respondents per stakeholder group	31
Range	min=9 Max.=75

Figure 11 Statistical analysis – Role of the stakeholders in EIA-process

1.2.1.3 Interviews

In order to get a more detailed image of the application of EIA, interviews with selected EIA-stakeholders were conducted. This approach leads to more profound insights into the actual day-to-day difficulties in EIA implementation and a more thorough picture of which methods are in use and the pros and cons of different methods, especially because the interviewees can provide information going beyond the information gained by the very formal structure of the questionnaire. The selection of the interviewees followed two different sets of criteria: a geographical one and a stakeholder-oriented one.

Geographical criteria for the selection of the interviewees

As the results of the interviews should reflect the European situation the following criteria were taken into account:

- interviewees from new European Member States and old European Member States;
- interviewees from large MS and small MS;
- interviewees from MS from the southern, the northern, the eastern and the western part of the EU.

Regarding these criteria, interviewees from the following ten European MS were selected:

- Austria (old MS, small country, Central Europe);
- Czech Republic (new MS, small country, Central Europe);
- France (old MS, large country, Western Europe);
- Germany (old MS, large country, Central Europe);
- Latvia (new MS, small country, Eastern Europe);
- Poland (new MS, large country, Eastern Europe);
- Portugal (old MS, small country, Southern Europe);
- Slovakia (new MS, small country, Eastern Europe);
- Sweden (old MS, small country, Northern Europe); and
- United Kingdom (old MS, large country, North Western Europe).

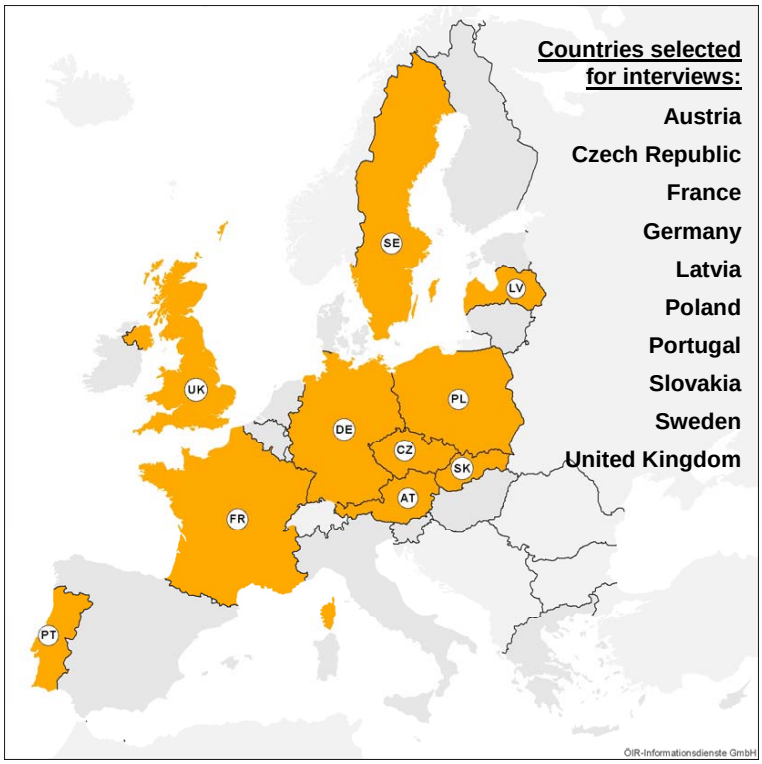

Figure 12 Geographic distribution of the countries selected for interviews

In order to compare the EIA-application in Europe with the way countries outside Europe apply EIAs, additionally to the 10 European countries selected, two non-EU foreign countries were chosen for a more detailed investigation of their EIA application. The two selected countries are USA and Canada because of their similar conditions as highly industrialised countries and their long experience with EIA. (The National Environmental Policy Act of 1969 enacted by the Congress of the United States of America in 1969 was worldwide the first law coming up with the term "environmental impact assessment" on a legal basis.) In addition, one expert interview was carried out in Ireland.

Stakeholder-oriented criteria for the selection of the interviewees

The EIA-experts interviewed should form a comprehensive picture of the EIA-application in each of the countries selected. Thus the views of experts at national and regional level being mainly involved in the transformation of the EU-Directive into national or regional legislation should be taken into account as well as the views of persons actually dealing with projects subject to EIAs, as e.g. consultants, NGOs or representatives from the administrative side. The following EIA-stakeholder-groups have been taken into account for selection:

- representatives of national governments,
- regional bodies with competence in EIA-issues,
- NGO's,
- representatives of the private sector as e.g. consultants,
- others as e.g. researchers.

Interview guide and protocols

In order to prepare the interviews, an interview-guide has been developed by the (IMP)3 consortium and discussed with representatives of DG Environment. All in all, 50 interviews with 64 interviewees have been conducted (33 interviews in European countries and an additional 17 in USA and Canada). Each of the interviews was minuted in order to gain a well-structured basis for the analysis.

Figure 13 Number of EIA stakeholders interviewed

EIA-stakeholders interviewed

Country	Stakeholder type					
	national government	regional government	NGO	consultant	others (scientist etc.)	total
Austria	1	4	0	2	0	7
Czech Republic	2		1	2		5
Germany		2		1	1	4
France	1			1	1	3
Latvia	2					2
Poland	2					2
Portugal	1	1	1	1	1	5
Sweden	1	1	1	1		4
Slovakia	1		1	1	1	4
United Kingdom		1		1		2
Canada	2	2		3	1	8
USA	13	3	2			18
total	26	14	6	13	5	64

Figure 14 Number of interviewees per country and stakeholder type

1.2.2 Policy options and SWOT-Analysis

Based on the findings of the literature review, the analysis of the questionnaire and the interview results several policy options were elaborated within each of the three main themes of (IMP)3 (human health, risk assessment and projects subject to EIA).

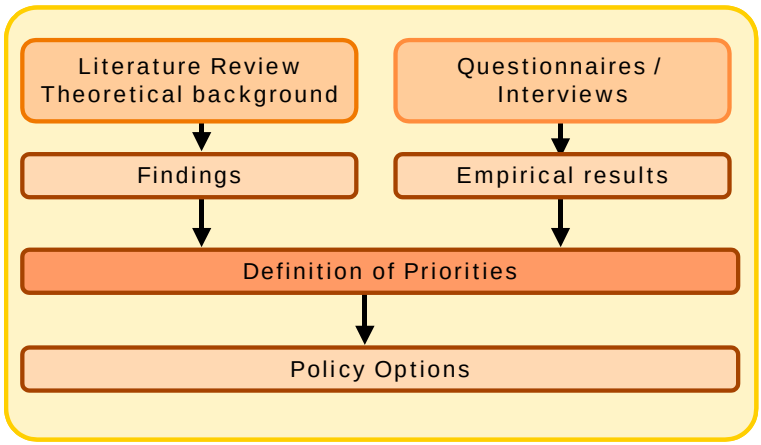

Figure 15 Deduction of policy options from the results of the analysis conducted

The policy options aim at tackling the identified weaknesses of the current European EIA practice overcoming the most important barriers on the way forward. They also attempt to build on and advance the strengths that partly exist.

The policy options represent a range of different courses of actions that the European Commission could take to better exploit the full potential of EIA to act as an effective instrument of preventive and precautionary environmental protection. The variety of the options comprises the whole range of potential measures that could be taken into account at the European level. This includes both "soft" and legislative courses of action. They are designed to operate mainly along three major axes:

- guidance;
- supportive measures;
- regulatory or legislative measures.

The development of such a range of policy options, as opposed to a simple list of recommendations, is a more robust approach as it recognizes that different levels of action are possible and that each has advantages and disadvantages.

The policy options presented in the report are addressed to the European Commission. Yet, eventually they are targeted at Member States and EIA stakeholders and are intended to influence actual implementation and application of EIA on national and regional level. Their main functions are to provide decision support to the policy making process on Community level, to assist informed decision-making on possible future amendments to European legislation, and to contribute to improvement of guidance such as supportive measures for EIA application, but also to stimulate discussions within the European EIA community.

For each policy option, a SWOT-Analysis has been conducted, which provides indicative lists of strengths and weaknesses, opportunities and threats. This form of a SWOT-Analysis is a simple, yet flexible and robust tool for decision-support that is meant as a basis for discussion outlining potential pros and cons of a decision. However, it can not substitute a more rigid cost-benefit-risk analysis to be done on part of the Commission.

SWOT-Analysis	
Strengths	Weaknesses
■	■
Opportunities	Threats
■	■
Concluding remarks	

Figure 16 Template table of a SWOT-Analysis

1.2.3 Communication process at EU level

As the results of (IMP)3 shall serve for a more harmonized application of the EIA-Directive and take into account various policy options possibly being taken at European level, a close communication with relevant stakeholders at EU-level was required. Therefore, a communication process with representatives of DG Environment and the EIA/SEA expert group and DG Research was established, in order to feed back the research approach and the intermediate results with relevant stakeholders at EU-level.

SEA/EIA Expert Group

The national experts on SEA and EIA on governmental level (= SEA/EIA Expert Group) meet twice a year in order to discuss relevant issues about EIA and SEA on the European level. The meeting is chaired by members of DG Environment.

This group of experts was informed at the start of the project about the research focus and their remarks on the research topic were taken into account at the elaboration of the details of the research of (IMP)3. Moreover, some of the group-members supported the (IMP)3-team in order to find relevant EIA-stakeholders at the national level.

Intermediate results of the data-analysis were presented to the SEA/EIA Expert Group and the final results will be presented and discussed at upcoming meetings.

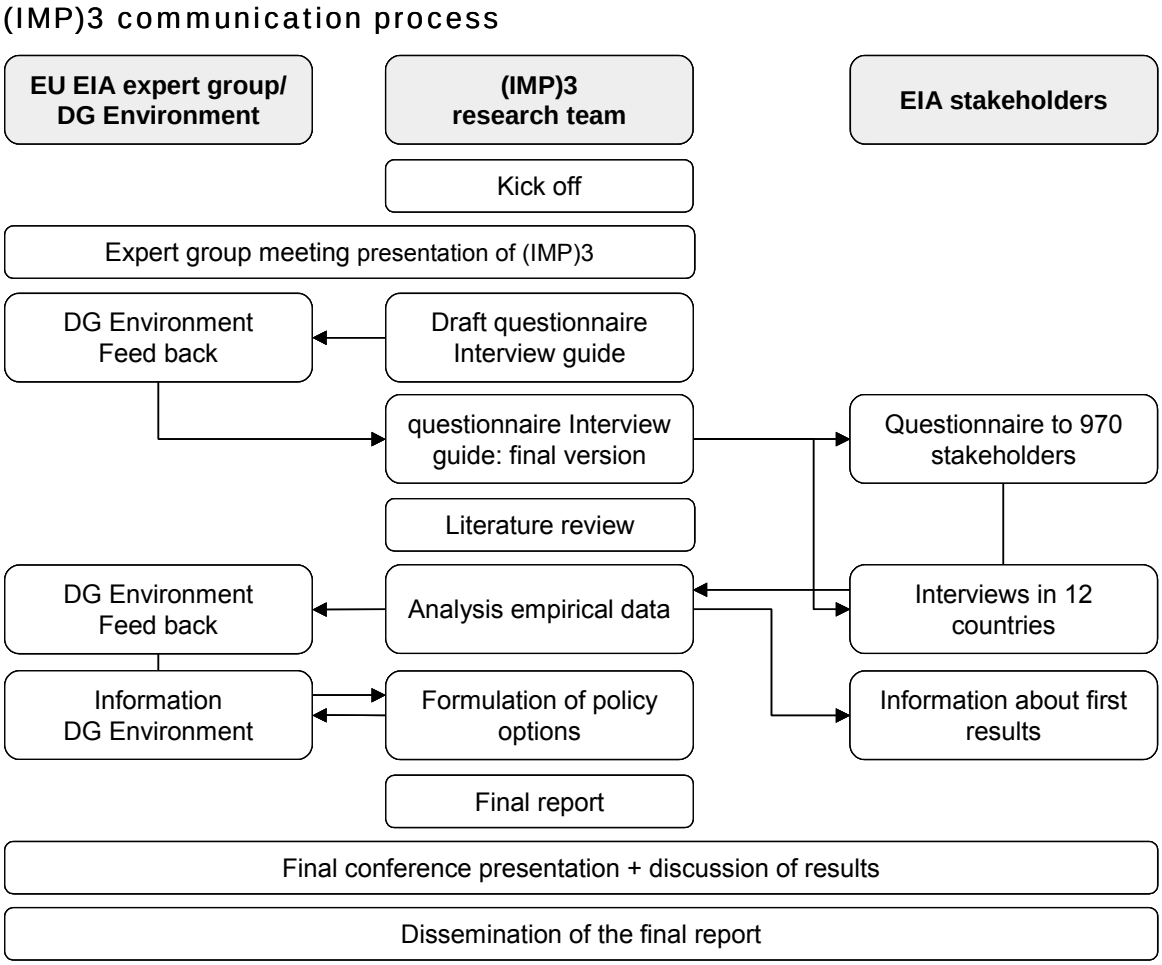

Figure 17 (IMP)3 communication process with EIA-stakeholders at EU-level

DG Environment

In order to ensure the usability of the results of (IMP)3, serving as input for the policy making process on the European level, members of DG Environment were informed about the work plan and the progress of the project and their feed-back was incorporated into the next steps of (IMP)3. The following formal contacts were established:

- 1st co-ordination meeting at the start of (IMP)3: general information about the project and fine-tuning of the research focus of (IMP)3;
- 2nd co-ordination meeting: presentation of the draft questionnaire and the draft interview guide;
- 3rd co-ordination meeting: presentation of first results of the analysis of the empirical data coming from the questionnaire and the interviews, agreement about the form of the results of (IMP)3 (elaboration of several policy options including a SWOT-Analysis for each option); and
- pre-information about the policy options proposed by (IMP)3.

The close contact with DG Environment aimed to ensure that the results of (IMP)3 are a useful contribution to the policy making process of DG Environment concerning the improvement of EIA-application.

1.2.4 Organising the work and reporting

Based on the main issues of (IMP)3, human health, risk assessment and projects subject to EIA the work of (IMP)3 is organised along five work-packages (WPs):

- WP1 concentrates on the gathering of empirical data about the application of EIA in Europe and abroad, including the dissemination of a questionnaire to EIA-stakeholders in all 25 Member States and interviews with EIA-stakeholders;
- WP2 “Human health” focuses on Objective A: a better incorporation of human health aspects into EIA;
- WP3 “Risk assessment” concentrates on Objective B: a better integration and more consistency of risk assessments, regarding various sources of risks (natural hazards, accidents, sabotage);
- WP4 “Projects subject to EIA” focuses on Objective C: a survey of project types subject to EIA; and
- In WP5, the results of WP1 to WP4 are merged into a final report and a conference has been organised in order to discuss the issues raised at a broader level.

Within these work-packages, research is taken into account at international and national levels such as the activities of the World Health Organisation on Health Impact Assessment, studies at European level and national studies related to the specific themes. The actual report concentrates on projects subject to EIA.

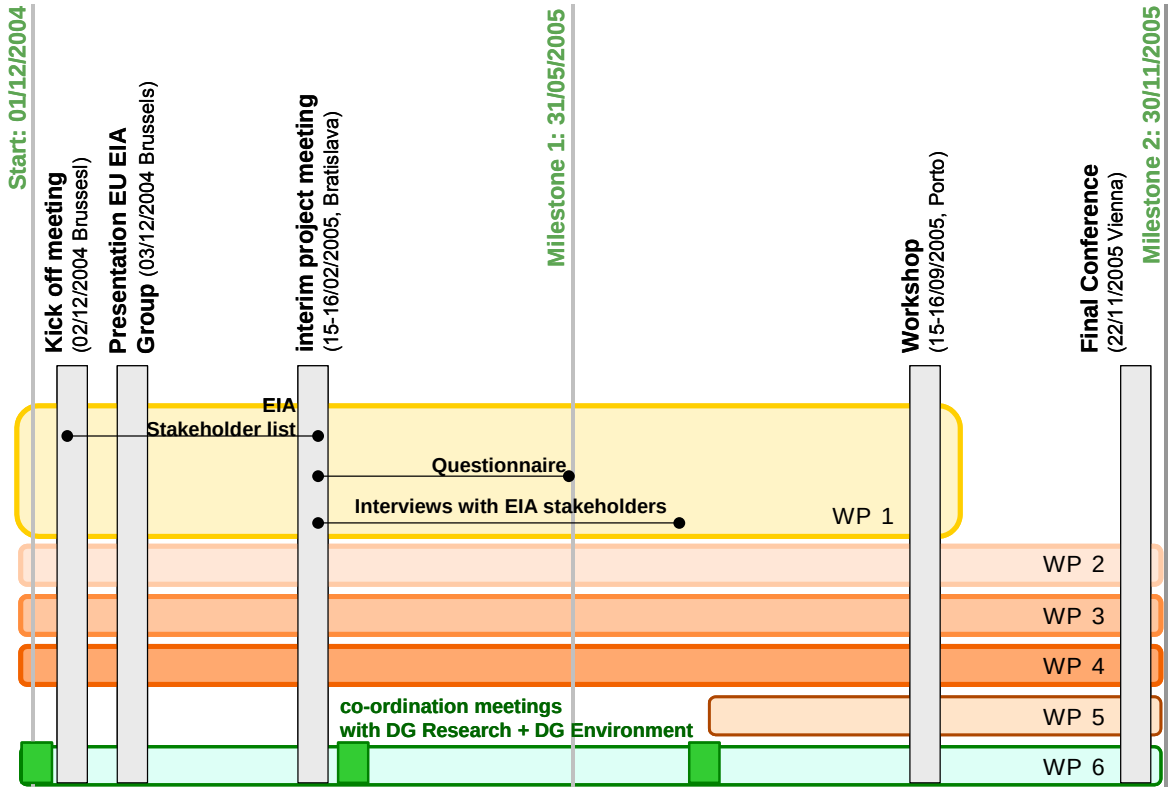

Figure 18 Timetable (IMP)3

Reporting

The results of (IMP)3 are laid down within four reports:

- Report Human Health (results of work-package 2);
- Report Risk Assessment (results of work-package 3);
- Report Projects Subject to EIA (results of work-package 4); and
- Final Report.

The three work-package reports comprise all relevant information about the results within each main theme of (IMP)3 (human health, risk assessment and projects subject to EIA). Each of them includes the relevant information so that it can be read and understood without reading the other reports.

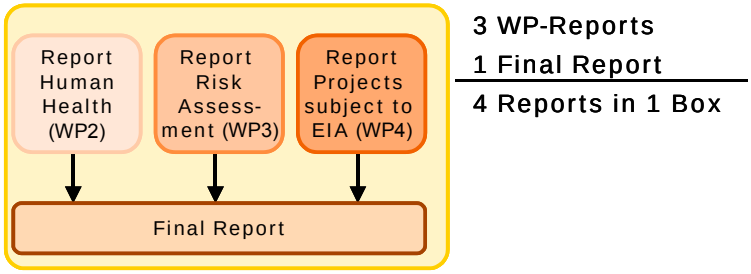

Figure 19 Structure of the reports of (IMP)3

The final report sums up the most important results of the work-package reports. In particular it presents an overview of the SWOT-Analysis of the policy options.

Share of responsibilities for Work Package 4

The split of responsibilities for contributions to the present Work Package 4 report between the partners of the IMP(3) consortium is described below.

Chapter/ Section	Responsible Partner/s	with contributions	reviewed by
1	Umweltbundesamt (Federal Environment Agency)	To: Section 1.3: ÖIR, Österreichisches Institut für Raumplanung (Austrian Institute for Regional Studies and Spatial Planning)	Umweltbundesamt (Federal Environment Agency)
2	Umweltbundesamt (Federal Environment Agency)	To: Section 2.1.2 and 2.2: (for screening approaches) CITTA, Research Centre for Territory, Transports and Environment Faculdade de Engenharia da Universidade do Porto (for additional project types) SZAP, Slovenská agentúra životného prostredia (Slovak Environmental Agency)	Umweltbundesamt (Federal Environment Agency)
3	Umweltbundesamt (Federal Environment Agency) CITTA, Research Centre for Territory, Transports and Environment Faculdade de Engenharia da Universidade do Porto SZAP, Slovenská agentúra životného prostredia (Slovak Environmental Agency)	To: Section 3.1: Umweltbundesamt (Federal Environment Agency) To: Section 3.2.1 and 3.3.2: Umweltbundesamt (Federal Environment Agency) To: Section 3.2.2 and 3.3.1: SZAP, Slovenská agentúra životného prostredia (Slovak Environmental Agency) To: Section 3.2.3 and 3.3.3 CITTA, Research Centre for Territory, Transports and Environment Faculdade de Engenharia da Universidade do Porto	Umweltbundesamt (Federal Environment Agency)
4	Umweltbundesamt (Federal Environment Agency)	CITTA, Research Centre for Territory, Transports and Environment Faculdade de Engenharia da Universidade do Porto	Umweltbundesamt (Federal Environment Agency)
5	Umweltbundesamt (Federal Environment Agency) CITTA, Research Centre for Territory, Transports and Environment Faculdade de Engenharia da Universidade do Porto SZAP, Slovenská agentúra životného prostredia (Slovak Environmental Agency)	To: Section 5.1 – 5.7: Umweltbundesamt (Federal Environment Agency) To: Section 5.4 and 5.7: CITTA, Research Centre for Territory, Transports and Environment Faculdade de Engenharia da Universidade do Porto To: Section 5.5: SZAP, Slovenská agentúra životného prostredia (Slovak Environmental Agency)	Umweltbundesamt (Federal Environment Agency)
6	Umweltbundesamt (Federal Environment Agency) CITTA, Research Centre for Territory, Transports and Environment Faculdade de Engenharia da Universidade do Porto SZAP, Slovenská agentúra životného prostredia (Slovak Environmental Agency)		Umweltbundesamt (Federal Environment Agency)
Annex 1	Umweltbundesamt (Federal Environment Agency)		

1.3 Contribution to policy development

(IMP)3 goes in line with the European policy to establish a sustainable development, which is laid down e.g. in the Sixth Environment Action Programme of the European Community *"Environment 2010: Our future, Our choice"* and the European Spatial Development Perspective (ESDP).

The main goal of (IMP)3 to contribute to the process of a more harmonized application of EIAs meets directly the scientific and technological needs of the policies of the Community related to the application of the EIA-Directive (97/11/EC). In detail (IMP)3:

- provides a better understanding of ”impacts” and clarifies different interpretations of environment, health, vulnerability, risks, ... within EU 25;
- provides a better understanding of EIA applications;
- analyses the improvement of the coherence of EIA with different assessment tools (health impact assessment etc.); and
- gives proposals for the integration of health aspects into EIA, how to come to a risk characterisation and suggestions for improving the coverage of projects types likely to have adverse effects on the environment.

Setting up policy options in the three core fields of the research human health, risk assessment and project types, (IMP)3 contributes directly to the scientific and technological needs of the policies of the Community in terms of the improvement of the application of the EIA.

2 RELEVANT LEGISLATION, GUIDANCE AND EXISTING EVALUATION STUDIES

EC environmental law is found in the EC Treaty, the directives, regulations and decisions adopted by the Community's institutions, the international agreements, which the EC has ratified, and the case law of the European Court and the Court of the First Instance. To provide a more profound basis for considering policy options, the following paragraphs will describe the institutional framework of the European Community.

EC TREATY

The EC Treaty lays down the institutional framework of the European Community and defined institutional powers and procedures to be followed in adopting laws. It enables the institutions to take three forms of legally binding measures – namely directives, regulations and decisions.

Directives

Directives are the most common form of EC legislation. They set out a result which member states are to achieve (for example, that drinking water must comply with certain standards) but leave to the member states to decide how that result will be reached. To fully comply with directives member states have to:

- Pass national laws which give full effect to the directive within the timetable laid down in the directive itself (normally within two years of the directive's adoption) and inform the Commission that they have passed the required laws; and
- Make sure that these laws are complied with in practice. In passing laws to implement a directive, member stats do not need to transpose the directive word for word into their national legislation. However, they must make sure that the laws passed guarantee the full application of the directive. This means that where the directive is intended to create rights for individuals, the persons concerned must be able to see what their rights are and, if necessary, rely on them in national courts. Adopting administrative practices which can be altered easily and which may not receive adequate publicity will not be enough to implement a directive. States cannot escape the obligation to pass laws to implement directives. Even where they are in practice, already acting in accordance with the directive's requirements, states must pass laws implementing the directive's provisions.

As stated, member states can decide for themselves what methods to use to achieve the result laid down in the directive. This means that if, for example, a directive states that nitrogen dioxide levels in air (generally due to traffic exhaust fumes) must not exceed certain concentrations, it is up to the state to decide what methods it will employ to make sure that those concentrations are not exceeded. This means that if the directive itself does not require a reduction in traffic to achieve those levels, the state is not required to reduce traffic if other methods are available to allow it to comply with the directive's standards. The member state can decide how to achieve the required levels but it must make sure that it achieves the result required by the directive. It will not be enough for a state to say that it has done its best to achieve the result.

Regulations

Regulations are directly binding on the persons to whom they are addressed including member states, individuals and legal persons. They can be made by either the Commission or the Council. Power to make decisions may be expressly given by the EC Treaty or by specific regulations or directives. They are not used often in environmental matters.

Decisions

Decisions are directly binding on the persons to whom they are addressed including member states, individuals and legal persons. They can be made by either the Commission or the Council. Power to make decisions may be expressly given by the EC Treaty or by specific regulations or directives. They are not used often in environmental matters.

International agreements

The EC has the power to enter into certain international agreements. These agreements will them become part of EC law. This has three consequences:

1. it means that the international agreement can give rise to rights and duties, which may be relied upon by individuals in national courts;
2. decisions of any organizations created by the agreement will also become part of Community law;
3. the European Court will be able to interpret and apply the agreement and decisions of the organization created by the agreement.

Case law of the European Court and Court of First Instance

Judgements of the European Court and the Court of First Instance are important in interpreting provisions of EC law. Only the European Court can give an authoritative interpretation of EC law or a decisive judgement on whether or not a member state has failed to comply with a provision of EC environmental law. Since judgements of the Community courts will affect the way in which EC environmental laws are applied and may lead to Community and national environmental laws being changed, it is vital to be aware of the court's rulings.

2.1 European and national EIA legislation with regard to WP focus

2.1.1 European level

2.1.1.1 Directives

EIA Directive (97/11/EEC) – Council Directive amending Dir 85/337 on the assessment of the effects of certain public and private projects on the environment, OJ 1997 No L 73/5

The environmental impact assessment (EIA) directive is perhaps the most well known of the ECs environmental laws. It requires an assessment of the environmental impact of any project likely to have significant effects on the environment before any consent can be given. The directive lays down procedures for assessments but does not prevent a project from obtaining consent, even if the EIA shows that it will damage the environment.

Projects that may require assessment are listed in two Annexes to the directive. Projects in Annex I, must always be subject to EIAs before they receive consent. Annex II projects are to be subjected to EIAs "where member states consider (the project's) characteristics require assessments. Although states seem to have a lot of discretion in relation to Annex II projects, the discretion may sometimes be non-existent because of the particular location or effects of a proposed project.

SEA Directive – Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

The purpose of the SEA-Directive is to ensure that environmental consequences of certain plans and programmes are identified and assessed during their preparation and before their adoption. The public and environmental authorities can give their opinion and all results are integrated and taken into account in the course of the planning procedure. After the adoption of the plan or programme the public is informed about the decision and the way in which it was made. In the case of likely transboundary significant effects the affected Member State and its public are informed and have the possibility to make comments which are also integrated into the national decision making process.

IPPC-Directive (96/61/EC) – Directive on INTEGRATED POLLUTION PREVENTION AND CONTROL, OJ 1996 No L 257/26

The directive on integrated pollution prevention and control (IPPC) sets out a framework of permits for certain industries. Common EC emission limits to be applied within the framework of this directive will be adopted later. The main types of industry covered are energy, production and processing of metals, the mineral industry, the chemical industry, waste management and other activities (including pulp and paper making plants; dyeing of textiles, tanning of hides; slaughterhouses; food production processes; intensive rearing of poultry and pigs; installations for disposal or recycling of animal carcasses and animal waste; installations treating substances, objects or products with organic solvents where their treatment capacity exceeds certain limits; and installations for the production of carbon electro graphite by means of incineration or graphitisation).

All industries covered by the directive require a permit. Applications for permits must provide the national authorities with specified information and the permits must contain the conditions required by the directive and, in particular, emission limit values based on the best available techniques

(BATs). Permits must include all measures necessary to ensure that the installation is operated so that the following requirements are complied with:

- All appropriate preventive measures are taken against pollution, in particular through the application of BAT (but the authorities cannot prescribe the use of a particular technique or technology).
- No significant pollution is caused
- Waste production is avoided; where waste is produced it should be recovered or, where that is technically and economically impossible, disposed of while avoiding or reducing any impact on the environment.
- Energy is used efficiently.
- Necessary measures are taken to prevent accidents and limit their impacts.
- When activity stops or industry closes, necessary measures are taken to avoid pollution risk and the site of operation returns to a satisfactory sate.

If an environmental quality standard requires stricter conditions than those, which can be achieved using BAT, permits must also include additional measures. Other specified conditions are also laid down in permits.

The list of project types from Annex I and II of the EIA Directive[7] shows all project types listed in Annex I of the IPPC Directive (96/61/EC). The following table shall give an overview of the interrelation between Annex II project types of the EIA Directive with relevant BAT documents and reference to the IPPC Directive.

Project subject to article a (2) ANNEX II EIA Directive		Associated BREF document	IPPC Directive ANNEX I
3	b) Installations for the manufacture of cement;	3 Reference Document on Best Available Techniques in the Cement and lime Manufacturing Industry	3.1
3	d) Installations for the manufacture of glass including glass fibre;	8. Reference Document on Best Available Techniques in The Glass Manufacturing Industry	3.3
3	f) Manufacture of ceramic products by burning, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain	24. Reference Document on Best Available Techniques in the Ceramic manufacturing Industry	3.5
8	c) Plants for the tanning of hides and skins;	9. Reference Document on Best Available Techniques for the Tanning of Hides and Skins	6.3
8	b) Plants for the pretreatment (operations such as washing, bleaching, mercerization) or dyeing of fibres or textiles;	10. Reference Document on Best Available Techniques for the Textiles Industries	6.2
7	Food industry a) Manufacture of vegetable and animal oils and fats; b) Packing and canning of animal and vegetable products; c) Manufacture of dairy products; d) Brewing and malting; e) Confectionery and syrup manufacture; g) Industrial starch manufacturing installations; h) Fish-meal and fish-oil factories; i) Sugar factories.	23. Draft Reference Document on Best Available Techniques in the Food, Drink and Milk Industries	6.4 (b) 6.4 (c) 6.4 (b2) 6.4 (b2)

Figure 20 Projects subject to Annex II EIA Directive 97/11/EC with relevant BAT documents and relevant projects from IPPC Directive 96/61/EC

[7] Directive 97/11/EC of European Council No. 97/11/EC which amends the Directive No. 85/337/EEC on Environmental impact assessment of some public and private projects

SEVESO II Directive – Council Directive 96/82/EC on the control of major-accident hazards. OJ No L 10 of 14 January 1997

On 9 December 1996, Council Directive 96/82/EC on the control of major-accident hazards (OJ No L 10 of 14 January 1997)- so-called Seveso II Directive – was adopted. Member States had up to two years to bring into force the national laws, regulations and administrative provisions to comply with the Directive. From 3 February 1999, the obligations of the Directive have become mandatory for industry as well as the public authorities of the Member States responsible for the implementation and enforcement of the Directive.

The Seveso II Directive has fully replaced its predecessor, the original Seveso Directive. Important changes have been made and new concepts have been introduced into the Seveso II Directive. This includes a revision and extension of the scope, the introduction of new requirements relating to safety management systems, emergency planning and land-use planning and a reinforcement of the provisions on inspections to be carried out by Member States.

The aim of the Seveso II Directive is two-fold. Firstly, the Directive aims at the prevention of major-accident hazards involving dangerous substances. Secondly, as accidents do continue to occur, the Directive aims at the limitation of the consequences of such accidents not only for man (safety and health aspects) but also for the environment (environmental aspect).

The scope of the Seveso II Directive refers solely to the presence of dangerous substances in establishments. It covers both, industrial "activities" as well as the storage of dangerous chemicals. The Directive can be viewed as inherently providing for three levels of proportionate controls in practice, where larger quantities mean more controls. A company who holds a quantity of dangerous substance less than the lower threshold levels given in the Directive is not covered by this legislation but will be proportionately controlled by general provisions on health, safety and the environment provided by other legislation which is not specific to major-accident hazards. Companies who hold a larger quantity of dangerous substance, above the lower threshold contained in the Directive, will be covered by the lower tier requirements. Companies who hold even larger quantities of dangerous substance (upper tier establishments), above the upper threshold contained in the Directive, will be covered by all the requirements contained within the Directive.

Important areas excluded from the scope of the Seveso II Directive include nuclear safety, the transport of dangerous substances and intermediate temporary storage outside establishments and the transport of dangerous substances by pipelines.

EMAS-Regulation (EEC No 1836/93) – ECO-MANAGEMENT AND AUDIT SCHEME

The eco-management and audit scheme (EMAS) promotes the use of environmental management systems and auditing as a tool for evaluating certain industrial activities' environmental performance. It also aims to provide information on environmental performance to the public. Participation in the scheme is voluntary. Companies, which wish to participate in the scheme, commit themselves to establish, develop, implement, maintain and update an internal environmental management system, which will go beyond minimum regulatory requirements.

Habitats Directive (92/43/EEC) – Council Directive on the conservation of natural habitats and of wild fauna and flora

Under the habitats directive, member states are to establish a system of strict protection for plant and animal species listed in Annex V of the directive. This means that for animal species falling

within the Annex, member states must prohibit deliberate capture or killing in the wild, deliberate disturbance, especially during breeding, rearing, hibernation and migration periods, deliberate destruction or taking of eggs from the wild and deterioration or destruction of breeding sites or resting places. For plant species listed in the directive, member states must prohibit deliberate picking, collecting, cutting, uprooting or destruction of these plants in the wild. Keeping, transport, sale or exchange and offering for sale or exchange of live or dead specimens of plants or animals taken in the wild are also prohibited activities. The directive allows certain limited derogations from this absolute protection of species. For the less endangered wild plant and animals listed in the directive's Annex V, capture or killing of animals or picking of plants will not necessarily be prohibited but member states may take measures to prevent overexploitation of these species. These measures may include, for example, regulations regarding access to certain property or establishment of a system of licenses. However, where the capture or killing of certain animal species is allowed under the directive, the use of certain means of capture or killing and of certain modes of transport to capture or kill will be prohibited. These obligations relating to protection of animal and plant species have been in force since June 1994.

In addition to protecting those species already in their country, member states are to study the desirability of reintroducing certain native wild species. Consultation of the public concerned must be carried out before any reintroduction takes place. Member states must also make sure that the deliberate introduction into the wild of any species, which is not native to that state is regulated so that habitats and animal and plant species will not be harmed. If necessary, such introduction can be prohibited.

The Habitats Directive aims – besides the protection of species – at designating special areas of conservation in order to create a coherent European ecological network, called Natura 2000. Areas classified as special protection areas pursuant to the Birds Directive have to be incorporated into the coherent European ecological network.

The ecological conditions of the Natura 2000 sites must not be deteriorated. Therefore Article 6 of the Habitats Directive demands an appropriate assessment for any conception or project likely to have a significant effect on the conservation objectives of such an area.

The EU Directives concerning EIA and the assessment due to Habitats Directive differ especially in the

- Scope of the assessment;
- Objectives of the assessment;
- Procedural steps; and
- Legally binding consequences.

One of the main differences between the Habitats Directive and the EIA Directive is that there is no list of projects in the Habitats Directive stating a binding assessment procedure for certain types of projects. Accordingly the decision whether a project has to undergo an impact assessment is always a case-by-case decision taking into consideration the characteristics of the Natura 2000 site and the characteristics of the project. Also projects outside the Natura 2000 site can be subject to an impact assessment.

Water Framework Directive (WFD) – Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

In October 2000 the 'Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy' (EU Water Framework Directive or WFD) was adopted. The purpose of the Directive is to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. It will ensure all aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands meet 'good status' by 2015. The Directive requires Member States to establish river basin districts and for each of these a river basin management plan. The Directive envisages a cyclical process where river basin management plans are prepared, implemented and reviewed every six years. There are four distinct elements to the river basin planning cycle: characterisation and assessment of impacts on river basin districts; environmental monitoring; the setting of environmental objectives; and the design and implementation of the programme of measures needed to achieve them.

In accordance with the WFD is a need to prevent or reduce the impact of incidents in which water is accidentally polluted. Measures with the aim of doing so should be included in the programme of measures. Member States should adopt measures to eliminate pollution of surface water by the priority substances and progressively to reduce pollution by other substances which would otherwise prevent Member States from achieving the objectives for the bodies of surface water.

Each Member State shall ensure the establishment for each river basin district, or for the part of an international river basin district within its territory, of a programme of measures, taking account of the results of the analyses required under Article 5, in order to achieve the objectives established under Article 4. Such programmes of measures may make reference to measures following from legislation adopted at national level and covering the whole of the territory of a Member State. Where appropriate, a Member State may adopt measures applicable to all river basin districts and/or the portions of international river basin districts falling within its territory.

Each programme of measures shall include the "basic" measures which are the minimum requirements to be complied with and shall consist first of those measures required to implement Community legislation for the protection of water, including measures required under the legislation specified in Article 10 and in part A of Annex VI; the Environmental Impact Assessment Directive (85/337/EEC) is part of this legislation.

2.1.1.2 International agreements

ESPOO Convention – Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991)

The ESPOO (EIA) Convention sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across borders.

The ESPOO Convention entered into force on 10 September 1997. An Amendment to the Convention was adopted in 2001. The amendment, once in force, will open the Convention to accession upon approval by UN Member States that are not members of the UNECE. A second amendment to the Convention was adopted in 2004. The amendment, once in force, will allow, as

appropriate, affected Parties to participate in scoping; undertake reviews of compliance; revise the Appendix I (list of activities); and make other minor changes.

EIA information resources and links are available, as well as a series of guidelines prepared under the ESPOO Convention to help in the application of the Convention:

- Appendix I: List of activities;
- Appendix II: Content of the environmental impact assessment documentation;
- Appendix III: General criteria to assist in the determination of the environment significance of activities not;
- Guidance on the practical application of the ESPOO Convention – Guidelines on good practice and on bilateral and multilateral agreements;
- Guidance on public participation in EIA in a transboundary context (Annex VIII to report of 3rd meeting of Parties, ECE/MP.EIA/6);
- Guidance on subregional cooperation (Annex V to report of 3rd meeting of Parties, ECE/MP.EIA/6) Guidelines on EIA in a Transboundary Context in the Caspian Sea Region – produced by UNEP, UNECE, EBRD and the Caspian Environment Programme; and
- Specific methodologies and criteria to determine the significance of adverse transboundary impact (1995 report, CEP/WG.3/R.6), UNECE.

The list of project types from Annex I and II of the EIA Directive[8] shows all project types listed in appendix I of the ESPOO Convention. Figure 21 and Figure 22 provide an overview of the related project categories listed subject to the EIA Directive and the ESPOO Convention.

ANNEX I Directive 97/11/EC	ESPOO Convention
1. Crude-oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 tonnes or more of coal or bituminous shale per day.	1. Crude oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 metric tons or more of coal or bituminous shale per day.
2. Thermal power stations and other combustion installations with a heat output of 300 megawatts or more, and – nuclear power stations and other nuclear reactors including the dismantling or decommissioning of such power stations or reactors 1 (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).	2. (a) Thermal power stations and other combustion installations with a heat output of 300 megawatts or more, and (b) Nuclear power stations and other nuclear reactors, including the dismantling or decommissioning of such power stations or reactors 1/(except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).
(b) Installations designed: – for the production or enrichment of nuclear fuel, – for the processing of irradiated nuclear fuel or high-level radioactive waste, – for the final disposal of irradiated nuclear fuel, – solely for the final disposal of radioactive waste, – solely for the storage (planned for more than 10 years) of irradiated nuclear fuels or radioactive waste in a different site than the production site.	3. Installations solely designed for the production or enrichment of nuclear fuels, for the reprocessing of irradiated nuclear fuels or for the storage, disposal and processing of radioactive waste.
4. Integrated works for the initial smelting of cast-iron and steel;	4. Major installations for the initial smelting of cast iron and steel and for the production of non-ferrous metals.

[8] Directive 97/11/EC of European Council No. 97/11/EC which amends the Directive No. 85/337/EEC on Environmental impact assessment of some public and private projects

ANNEX I Directive 97/11/EC	ESPOO Convention
5. 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 tonnes of finished products, for friction material, with an annual production of more than 50 tonnes of finished products, and for other uses of asbestos, utilization of more than 200 tonnes per year.	5. 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 metric tons finished product; for friction material, with an annual production of more than 50 metric tons finished product; and for other asbestos utilization of more than 200 metric tons per year.
6. Integrated chemical installations, i.e. those installations for the manufacture on an industrial scale of substances using chemical conversion processes, in which several units are juxtaposed and are functionally linked to one another and which are (i) for the production of basic organic chemicals; (ii) for the production of basic inorganic chemicals; (iii) for the production of phosphorous-, nitrogen- or potassium-based fertilizers (simple or compound fertilizers); (iv) for the production of basic plant health products and of biocides; (v) for the production of basic pharmaceutical products using a chemical or biological process; (vi) for the production of explosives.	6. Integrated chemical installations.
7. (a) Construction of lines for long-distance railway traffic and of airports with a basic runway length of 2 100 m or more; (b) Construction of motorways and express roads	7. (a) Construction of motorways, express roads 2/and lines for long-distance railway traffic and of airports 3/with a basic runway length of 2,100 metres or more;
(c) Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road, or realigned and/or widened section of road would be 10 km or more in a continuous length.	(b) Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road, or realigned and/or widened section of road, would be 10 km or more in a continuous length.
8. (a) Inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1 350 tonnes;	
(b) Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1 350 tonnes.	9. Trading ports and also inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1,350 metric tons.
9. Waste disposal installations for the incineration, chemical treatment as defined in Annex IIA to Directive 75/442/EEC4 under heading D9, or landfill of hazardous waste (i.e. waste to which Directive 91/689/EEC5 applies).	10. (a) Waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes.
15. Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres.	11. Large dams and reservoirs.
16. Pipelines for the transport of gas, oil or chemicals with a diameter of more than 800 mm and a length of more than 40 km.	8. Large-diameter pipelines for the transport of oil, gas or chemicals
11. Groundwater abstraction or artificial groundwater recharge schemes where the annual volume of water abstracted or recharged is equivalent to or exceeds 10 million cubic metres.	12. Groundwater abstraction activities or artificial groundwater recharge schemes where the annual volume of water to be abstracted or recharged amounts to 10 million cubic metres or more.
18. Industrial plants for the production of pulp from timber or similar fibrous materials; (b) production of paper and board with a production capacity exceeding 200 tonnes per day.	13. Pulp, paper and board manufacturing of 200 air-dried metric tons or more per day.

ANNEX I Directive 97/11/EC	ESPOO Convention
19. Quarries and open-cast mining where the surface of the site exceeds 25 hectares, or peat extraction, where the surface of the site exceeds 150 hectares.	14. Major quarries, mining, on-site extraction and processing of metal ores or coal.
	15. Offshore hydrocarbon production. Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 metric tons/day in the case of petroleum and 500 000 cubic metres/day in the case of gas. Offshore hydrocarbon production.
21. Installations for storage of petroleum, petrochemical, or chemical products with a capacity of 200 000 tonnes or more.	16. Major storage facilities for petroleum, petrochemical and chemical products.
12. (a) Works for the transfer of water resources between river basins where this transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year; (b) In all other cases, works for the transfer of water resources between river basins where the multiannual average flow of the basin of abstraction exceeds 2 000 million cubic metres/year and where the amount of water transferred exceeds 5% of this flow. In both cases transfers of piped drinking water are excluded.	18. (a) Works for the transfer of water resources between river basins where this transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year; and (b) In all other cases, works for the transfer of water resources between river basins where the multi-annual average flow of the basin of abstraction exceeds 2 000 million cubic metres/year and where the amount of water transferred exceeds 5 per cent of this flow. In both cases transfers of piped drinking water are excluded.
13. Waste water treatment plants with a capacity exceeding 150 000 population equivalent as defined in Article 2 point (6) of Directive 91/271/EEC6.	19. Waste-water treatment plants with a capacity exceeding 150 000 population equivalent.
17. Installations for the intensive rearing of poultry or pigs with more than: (a) 85 000 places for broilers, 60 000 places for hens; (b) 3 000 places for production pigs (over 30 kg); or (c) 900 places for sows.	20. Installations for the intensive rearing of poultry or pigs with more than: – 85 000 places for broilers; – 60 000 places for hens; – 3 000 places for production pigs (over 30 kg); or – 900 places for sows.
20. Construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km.	21. Construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km.

Figure 21 Interrelation of project categories listed in Annex I of the EIA Directive and the ESPOO Convention

ANNEX II Directive 97/11/EC	ESPOO Convention
Agriculture, silviculture and aquacultured: Initial afforestation and deforestation for the purposes of conversion to another type of land use;	17. Deforestation of large areas.
Energy industry: Installations for the harnessing of wind power for energy production (wind farms)	22. Major installations for the harnessing of wind power for energy production (wind farms).

Figure 22 Interrelation of project categories listed in Annex II of the EIA Directive and the ESPOO Convention

AARHUS Convention – Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Århus, 1998)

The Århus Convention establishes a number of rights of the public (citizens and their associations) with regard to the environment. Public authorities (at national, regional or local level) are to contribute to allowing these rights to become effective. The Convention provides for:

- the right of everyone to receive environmental information that is held by public authorities ("access to environmental information"). This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. Citizens are entitled to obtain this information within one month of the request and without having to say why they

require it. In addition, public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession;

- the right to participate from an early stage in environmental decision-making. Arrangements are to be made by public authorities to enable citizens and environmental organisations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment, these comments to be taken into due account in decision-making, and information to be provided on the final decisions and the reasons for it ("public participation in environmental decision-making");
- the right to challenge, in a court of law, public decisions that have been made without respecting the two aforementioned rights or environmental law in general ("access to justice").[9]

Regarding project types in relation to EIA the Aarhus Convention identifies the following to be addressed:

- Any activity not covered by paragraphs 1-19 above where public participation is provided for under an environmental impact assessment procedure in accordance with national legislation;
- The provision of article 6, paragraph 1 (a) of this Convention, does not apply to any of the above projects undertaken exclusively or mainly for research, development and testing of new methods or products for less than two years unless they would be likely to cause a significant adverse effect on environment or health; and
- Any change to or extension of activities, where such a change or extension in itself meets the criteria/thresholds set out in this Annex, shall be subject to article 6, paragraph 1 (a) of this Convention. Any other change or extension of activities shall be subject to article 6, paragraph 1 (b) of this Convention.

Convention on Biological Diversity (Rio de Janeiro, 1992)

The Convention on Biological Diversity was negotiated under the auspices of the United Nations Environment Programme (UNEP). It was opened for signature at the June 1992 UN Conference on Environment and Development (UNCED) and entered into force on 29 December 1993, ninety days after the 30th ratification. As of October 1998, more than 170 countries had become Parties. The three goals of the CBD are to promote the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.

2.1.1.3 Case law of the European Court and Court of First Instance

A List of the leading cases and judgements of the ECJ on environment can be found under: http://europa.eu.int/comm/environment/law/cases_judgements.htm.

[9] Source: http://europa.eu.int/comm/environment/aarhus/

2.1.2 National/regional level

Annex II of the Directive lists the categories of projects that have to undergo an EIA if they are likely to have a significant impact on the environment. Besides incorporating Annex I project types into national EIA legislation, for which EIA is obligatory, a variety of approaches to screening of Annex II project types exists across Member States.

Screening is one of the earliest stages in every EIA process. It corresponds to the determination of whether or not a certain project must be subject to an EIA prior or as a requirement to its licensing procedure.

According to Canter (1996) and Canter & Canty (1993) there are basically two approaches to screening worldwide: those based on policy delineations – a set of screening rules and criteria to be applied by a given community or group of countries – and the wording of preliminary studies as a means to determine impact significance. In the case of the European Union, whose screening practices could be regarded as belonging to the first type of screening approach given the set of rules defined by Directive 97/11/EU, preliminary environmental assessment studies are also used albeit in the context of case-by-case examinations.

In the European Union, there are mainly two kinds of screening tools used by MSs:

a. lists of projects with specified threshold values and criteria; and

b. case-by-case examinations.

Lists of projects are straightforward screening tools. According to the type of project or to certain project features, such as its dimensions or output data, projects are classified as to the need for an environmental impact assessment. Some projects are subject to EIA in all cases, independently of their dimensions, while other types of projects are subject to an EIA only above certain threshold values or when located in more ecologically sensitive areas. Threshold values are mostly technical, although in France there are also financial thresholds.

Lists defining those project categories that must be subject to EIA (in all cases or above certain threshold values) are inclusive (or positive) lists, as opposed to exclusive (or negative) lists, which identify project types or threshold values below which a development project is exempt from EIA.

In case-by-case examinations, a project is subject to an EIA if certain criteria are met. In some cases, the environmental effects of a project are forecasted and evaluated according to a set of predefined criteria, while in some other countries (e.g. Cyprus, Czech Republic, Greece and Hungary) case-by-case examinations take the form of preliminary or simplified EIA procedures whose results determine whether the project must be subject to a full EIA or not.

These two screening methods may also be used in combination, as in the cases where projects must be subject to mandatory EIA above specified threshold values and assessed on a case-by-case basis when below inclusive threshold values or between inclusive and exclusive threshold values.

Case-by-case examination is a more discretionary screening method, once the evaluation of the expected environmental effects of a project strongly depends on the relative weight given to each criterion considered. When compared to the use of positive lists, it enables a better consideration of

particular features, such as local ecological conditions or socio-economic specific context which may be determinant for the impact assessment of the project. However, it is a more time demanding and administrative resources consuming method that should thus be used only when environmental impacts may be determined to a large extent by local characteristics or in the cases of new or less familiar project types.

Figure 23 lists the screening approaches applied in the European Union Member States (except for Luxembourg, for which no information was found), as well as certain features closely related to the screening method, such as the legal context of EIA regulations, EIA authority and type of and administrative framework for EIA procedures.

Figure 24 classifies MSs according to the screening method and number of existing EIA procedures.

As for the screening method, a major distinction is made between those MSs applying case-by-case examinations and those where screening is made mainly through the use of (one or more) positive lists with thresholds. In the former case, MSs are also classified according to whether case-by-case assessments are applied to project types previously defined in positive lists similar to Annex II of the EIA Directive or to particular cases (not listed CBC).

Figure 23 Screening approaches applied in the EU 25 (except for Luxembourg)

Country	EIA Legislation	EIA Authority	EIA procedure		Screening Tools		
			National/Sectoral/Regional	Types	Lists	Thresholds	cbc analysis
Austria	National	Federal Ministry for Transport, Innovation and Technology and provincial governments	special provisions for (1) federal roads and high speed railroads projects and (2) water management projects	EIA and Simplified EIA	3 lists-table	columns 1-3	column 3 and under special provisions
Belgium	National for nuclear installations and storage of radioactive materials and coastal areas	Federal Administration	National				
Brussels		The Administration for Urbanism or the Brussels Institue for Management of the Environment	Two Ordinances (one for Urbanism procedure and one for Environmental Procedure)	1. Limited or Simplified EIA (Environmental Effects Note – LEEN) 2. Developed EIA	2 (urban projects) + 2 (env. projects) inclusive lists	✓	In-between inclusion / exclusion thresholds / criteria or applied to descriptive lists
Flanders		EIA Team of the Department of Environment and Infrastructure		1 type of EIA procedure, albeit for the possibility of exempting projects from the 2nd list if minor impacts proven through the wording of a LEEN	2 lists	✓	✓
Walloon		Regional sectoral authorities(Divisions Générales)			1 List	✓	
Cyprus	Under Environmental Protection Regulations	Environmental services of the Ministry of Agriculture, Natural Ressources and Environment	Within planning procedures	Preliminary EIA (PEIA) EIS	2 lists	✓	✓
Czech Republic	National	Ministry or Provincial authorities	under land use planning regulations	*Fact-finding* procedure and Full EIA	2 lists	both lists	second list (projects requiring *fact-finding* procedures)
Denmark	National and within (Spatial) Planning System. For SEA projects EIA regulations are to be found in other (than the Planning Act) regulations.	The regional Planning Authority (County Administration)	EIA is part of regional planning procedures If a project is already covered by other permits/licenses/exceptions, these replace an EIA permit.	1 type of EIA procedure	2 lists	Mandatory List (Annex 1) Project types listed in Annex 1, with a few exceptions, are also included in Annex II but without being associated to threshold values and criteria	(Annex 2)

Country	EIA Legislation	EIA Authority	EIA procedure		Screening Tools		
			National/Sectoral/Regional	Types	Lists	Thresholds	cbc analysis
Estonia	National	County Environmental Departments Ministry of the Environment in the cases of being the proponent or in the case of transboundary impacts	Under land-use planning procedures.	A two-stages EIA Procedure: EIA Programme phase EIA Report phase	2 lists	Both lists	✓
Finland	National	Ministry of the Environment + Coordination Authority Ministry of Trade and Industry for nuclear energy projects	Independent procedure required prior to the project's licensing/permit	1 type of EIA Procedure	1list	mandatory list	individual cases
France	National	Sectoral	integrated as part of each sectoral licensing procedure.	Full EIA and *Notice d'Impact sur l'Environnement*	3 Positive lists + 1 negative list	list 2 (technical thresholds) and 3 (financial thresholds)	
Germany	National (Federal Level) and/or for some project types regional (Länder level)	Sectoral (national/regional or local authorities)	Integrated as part of each licensing/permitting procedures for several project types	Full EIA Partly EIA procedure without a public hearing in the consultation phase	1 list (2-column table)	✓	General screening site-related screening
Greece	National	National, regional and local authorities (Prefectures)	Independent procedure	EIA (two stages process incorporating a preliminary assessment) at national and regional level Simplified EIA at prefecture level	4 lists: mandatory EIA projects (lists 1 & 2), screening cases (list 3) and simplified EIA projects (list 4)	all lists	screening project types
Hungary	National	Regional environmental inspectorates and, in the case of motorways, the National environmental inspectorate	National Level Independent EIA Procedure	Preliminary ES and detailed EIA	2 lists (mandatory list + screening list)	based on the transposition of Directive's Annex II projects	For screening list
Ireland	National Integration of EIA requirements into the land-use planning consent system and several other consent systems	Land-use planning local authority	Part of the licensing procedure. the licensing of projects listed in Part I of the 1st Schedule always require an EIS while those listed in part II only require an EIS for their license if they exceed certain thresholds	IPC or EIA, depending on the licensing sector/authority	2 lists The thresholds approach was adopted in implementing Annex II projects	threshold values enacted by each sectoral law (Lists 1+ 2)	only for 2nd list projects

Country	EIA Legislation	EIA Authority	EIA procedure		Screening Tools		
			National/Sectoral/Regional	Types	Lists	Thresholds	cbc analysis
Italy	Separate laws needed at national and regional level Given the historical context of land-use planning regulations at regional level, EIA was adopted mainly within regional urban planning legislation with some exceptions.	Italian regions were given the authority of EIA procedure for most part of the EU EIA Directive Annex II projects	Regional Level	Annex I and Annex II of the EIA Directive are transposed by different Italian Regulations.	2 lists	both lists	✓
Latvia	National	State Environmental Bureau Regional Environmental Boards	Part of the sectoral licensing but as an independent procedure	EIA procedure (mandatory EIA project types) Preliminary screening procedure	2 lists	Mandatory List	2nd List
Lithuania	National	Ministry of the Environment or other empowered (by the Ministry) institution	Independent procedure needed for the overall planning/licensing procedure of projects subjected to EIA	1 type	2 lists	both lists	2nd List
Malta	National level	Malta Environment and Planning Authority	National level Under land-use planning procedures	Environmental Impact Statement for Category I projects Environmental Planning Statement (or limited EIS) for Category II projects[10]	2 lists	Both Lists	Possible but seldom applied
Netherlands	National level EIA legislation enacted under Environmental Laws (Env. Management Act)	National Authorities, provinces Municipalities and "WaterBoards" (Waterschappen)	Independent from the licensing procedure but carried out in parallel way	Different EIA procedures for mandatory (list 1) and screening (list 2) projects	2 lists	Inclusion and exclusion thresholds	✓
Poland	National Level	Ministry or Provincial authorities	Part of licensing procedures within land-use planning policies and plans	2 types of EIA procedures for Group I and Group II projects	2 Lists	List 1 projects	✓
Portugal	National Level	Environment Institute	Part of the licensing procedure but as an independent process	2 type of EIA	2 lists	both positive lists	Possible but seldom applied

[10] Nevertheless, the Planning authority's Director may decide upon an Environmental Impact Statement (full procedure) for other projects not listed in Category I (even if listed in Category II) whenever expected to cause significant environmental effects.

Country	EIA Legislation	EIA Authority	EIA procedure		Screening Tools		
			National/Sectoral/Regional	Types	Lists	Thresholds	cbc analysis
Slovakia	National Level	Ministry of Environment	EIA procedures under land-use planning procedures.	2-level procedures for Annex I part A –compulsory and Annex I part B screening Need for the full (detailed) EIA for Annex I – part B projects is determined by the initial (preliminary) EIA's results.	1 List (2-columns table)	Columns A (compulsory EIA) and B (screening)	Column B projects below or in-between threshold values
Slovenia	National Level	Ministry of Environment and Spatial Planning Environmental Agency of the Republic of Slovenia	Under Land-use planning procedures	Full EIA procedure for both types of projects (lists 1 and 2)	2 lists	2nd list	
Spain	Basic regulation at national level, complemented (or not) by regional EIA regulations	2 competent regional authorities at National and regional level: the licensing authority and the environmental authority, to the exception of projects overrun by the latter	Regional level regulated by both the licensing (sectoral) and the environmental regional authorities	Specific EIA Procedures for certain project Types (e.g. urban planning developments)	2 lists	mandatory and "screening" lists	"screening" list (Annex II)
Sweden	National Level Based in the Swedish Environmental Code but also linked to spatial planning system as well as to other sectoral laws.	Different EIA authorities according to the sectoral development permit Case-by-case screening decision by County Administrative Boards	Part of (each) sectoral licensing procedure. The Environmental Code provides the (legal and institutional) framework for the permit procedure according to each sectoral activity.		1 list	mandatory EIA above threshold values	Most EIA Directive's Annex II projects (not transposed to Swedish EIA regulations) according to Annex III of the Directive (already transposed)
United Kingdom	Separate (albeit very similar) regulations for England & Wales, Northern Ireland and Wales	Local Planning Authority Most of the projects come under the land use planning consent systems for the UK. Where projects are not caught by planning legislation, other legislation exists covered by other consent systems.	The main local planning authorities act as the competent authorites, but other bodies have this responsibility under some of the other consent systems	1 Type of EIA Procedure	2 Lists (equivalent to Annexes I and II)	exclusive thresholds and/or criteria are set for Annex II projects	✓

SCREENING METHOD		LISTS		LISTS + CBC ANALYSIS	
		1 list	≥ 2 lists	List(s) + Listed CBC	List(s) + Not Listed CBC
EIA PROCEDURE	1 Type of EIA Procedure	Belgium (Walloon)	Slovenia	Belgium (Flanders)	Sweden
				Denmark	Finland
				Estonia	
				Ireland	
				Lithuania	
				UK	
	> 1 Type of EIA Procedures		France	Austria	
				Belgium (Brussels)	
			Malta	Cyprus	
			Portugal	Czech Republic	
				Germany	
				Greece	
				Hungary	
				Italy	
				Latvia	
				Netherlands	
				Poland	
				Slovakia	
				Spain	

Figure 24 Classification of MSs according to the screening method mainly applied and number of existing EIA procedures

Additionally, MSs are classified as to the number of screening approaches applied, according to the relevance of expected impacts in the sense that different EIA procedures should correspond to different demanding levels of environmental protection.

As it is shown in Figure 24, most EU countries apply case-by-case examinations as a screening tool. However, only Finland and Sweden apply case-by-case analysis to particular project types (not listed). In the former case, EIA may be integrated in land-use planning procedures, but always as an independent procedure. Projects not listed in the mandatory list are subject to EIA following a decision by the Minister of the Environment, if expected to have significant environmental effects on the basis of a case-by-case assessment. In the case of Sweden, there is a mandatory list describing all the project types subject to EIA in all cases. There is also the possibility for other projects, not included in the mandatory list, to be subject to an environmental impact assessment procedure by decision of the competent authority (County Administrative Boards), on the basis of a case-by-case analysis having in mind the technical characteristics of the project and the site ecological sensitiveness.

The great majority of countries (see Figure 24) apply case-by-case assessments for listed project types, according to one of three possible cases: case-by-case analysis is either applied (1) to projects falling below mandatory thresholds, (2) in-between inclusion and exclusion thresholds/criteria or (3) to projects included in descriptive lists.

In most of the cases, EIA is applied within land-use planning procedures, at national or local level, (Denmark, Czech Republic, Estonia, Ireland, Italy, Netherlands, Slovak Republic and the UK). In

some cases, EIA regulations are enacted and applied at regional level, as is the case of Belgium, Denmark, Netherlands, Italy and Spain.

In Malta and Portugal, there is the possibility for case-by-case assessments, although this is not usually applied as a screening method. In the case of France it is not even considered in the EIA regulations, once here almost all projects are *a priori* subjected to EIA. All these countries apply EIA at national level.

Nevertheless, for most of these countries, as well as for some of the cases with *listed case-by-case* screening procedures (e.g. Germany or Latvia), there is also the possibility for case-by-case assessments for not listed project types, whenever likely to give rise to significant environmental effects.

Figure 24 thus provides a useful picture of the screening tools most used throughout the European Union, which must be taken into account when considering possible future amendments to the screening approaches adopted at European level.

In the following the national/regional ways of implementing the Directive's Annexes are presented for the twelve countries, where Interviews have been conducted in this survey. In addition to the country-wise descriptions of the screening approaches also project types are listed, that have been introduced to national/regional legislation beyond the requirements of the Directive.

2.1.2.1 Austria

In Austria, EIA legislation was enacted at national level. The main EIA legislation is the Federal Act on Environmental Impact Assessment (Environmental Impact Assessment Act 2000).

Federal Act on Environmental Impact Assessment (Environmental Impact Assessment Act 2000) – BGBl. (Federal Law Gazette) No. 697/1993 as amended by BGBl. No. 773/1996, BGBl. I No. 89/2000, BGBl. I No. 108/2001, BGBl. I No. 151/2001, BGBl. I No. 50/2002, BGBl. I No. 153/2004 and BGBl. I No. 14/2005

Figure 25 EIA Austrian Regulation

Screening

Austria EIA legislation combines the use of thresholds/criteria with case-by-case examinations.

Annex I of the Federal Act on Environmental Impact Assessment lists project types according to a three column-table. Columns 1 and 2 list those projects subject to EIA in all cases and that shall be covered by an EIA procedure (Column 1) or a simplified procedure (Column 2). Column 3 defines threshold values to be applied in certain protected areas. The categories of protected areas referred to in Column 3 are defined in Annex 2. These consider categories A (special protection areas), B (Alpine zones), C (water protection and conservation areas), D (areas subject to air pollution) and E (settlement areas).

If projects under Annex 1 that fall below the threshold values or do not fulfill the criteria defined therein are spatially related to other projects and, together with them, reach the relevant threshold value or fulfil the criterion, the authority shall examine on a case-by-case basis whether significant harmful, disturbing or adverse effects on the environment are to be expected due to a cumulation

of effects and whether, as a result, an environmental impact assessment shall be performed for the project planned. A case-by-case examination shall not be carried out if the capacity of the project submitted is less than 25% of the threshold value. The environmental impact assessment shall be performed as a simplified procedure.

In case of projects for which a threshold value is defined for certain protected areas in Column 3 of Annex 1 and, if this criterion is fulfilled, the authority shall decide on a case-by-case basis, taking into consideration the extent and lasting effects of the environmental impact, whether significant adverse effects are to be expected for the protected habitat (Category B of Annex 2) or the protection purpose for which the protected area has been established (Categories A, C, D and E of Annex 2). In this examination, protected areas of Category A, C, D or E of Annex 2 shall only be considered if they have already been designated or included in the list of sites of Community importance (Category A of Annex 2) on the day when the procedure is initiated. If such adverse effects are to be expected, an environmental impact assessment shall be performed, the simplified procedure shall be applied.

When taking the decision on a specific case, the authority shall take into consideration certain criteria, listed in Article 3 paragraph 4.

In the case of modifications of projects leading to the surpassing of minimum threshold values, as well as for spatially related projects that together fulfill the limit threshold value above which EIA is mandatory, a case-by-case examination shall be performed by the competent EIA authority in order to determine whether or not there is the need for an EIA [Article 3 (1) and (2) of the EIA Act[11]]. A case-by-case examination shall not be carried out if the capacity of the project submitted is less than 25% of the threshold value.

There are also special provisions for the cases of federal roads and high speed railroad project developments as well as for water management project types.

Additional project types[12]

By comparing project types included in the national Austrian EIA act with the EIA Directive's project types the following additional project types have been implemented:

- Construction of particle accelerators ✓/S
- Construction of new installations for work (intended use in accordance with Article 1 (3) *Verordnung biologische Arbeitsstoffe* — VbA (Ordinance on Biological Agents at Work), BGBl. II No. 237/1998) with biological working substances of risk class 3 or 4 (Article 40 (4) no. 3 and 4 *ArbeitnehmerInnenschutzgesetz* — AschG (Health and Safety at Work Act, BGBl. No. 450/1994) that are intended for production purposes ✓/S

[11] This accumulation clause aims at preventing intentional evasion from an EIA procedure by the splitting up of a certain project by different operators or by designing the project just below the threshold values listed in BGBl. No. 14/2005's list of projects.

[12] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

- Construction of new installations for work with genetically modified micro-organisms of safety class 3 or higher (Article 5 no. 2 *Gentechnikgesetz* — GTG (Genetic Engineering Act), BGBl No. 510/1994) on a large scale (Article 4 no. 11 GTG, BGBl No. 510/1994).

2.1.2.2 Czech Republic

Figure 26 lists the most important EIA legislation documents enacted in the Czech Republic.

Czech National Council Act on Environmental Impact Assessment No. 244/1992
Decree of the Ministry of the Environment on professional qualification and regulation of some other aspects related to environmental impact assessment No. 457/2001
Act 100/2001 Coll. on Environmental Impact Assessment as amended by Act 93/2004 Coll

Figure 26 Czech EIA Regulations

Screening

The legislative basis for screening in the Czech Republic are §§ 6 and mainly 7 and also Annex 1 (exhaustive list of projects that are always subject to assessment and projects needing a fact-finding procedure) and Annex 2 of Act 100/2001 (principles for the fact-finding procedure).

In compliance with the EIA Directive Annex 1 to Act 100/2001 Coll. divides the projects into the following categories:

- Category I: projects, where significant effects on the environment are presumed, they are not subject to screening, the whole procedure starts with scoping;
- Category II: projects, where a case-by-case screening according to the characteristics of the project and of the possibly affected environment is needed.

Pursuant to § 7 para. 1 Act 100/2001 screening is carried out for:

- projects listed in Annex 1 category II;
- changes in any project listed in Annex 1, the capacity or extent of which is to be increased by 25% or more;
- changes in any project listed in Annex 1, where the technology, operation or manner of use significantly changes;
- changes in any project listed in Annex 1, by which relevant limit values are reached or the project's capacity or extent reaches the relevant limit values; and
- projects, for which the prolongation of validity of the statement is required.

If, after the *fact finding procedure* the competent EIA authority decides that a certain project is likely to have significant environmental impacts, then a full EIA is carried out. Developments on both lists are subjected to compulsory EIA, but according to different levels of administration decision type[13].

[13] Annex I projects are divided in two columns, A and B, according to the administration competencies in the field of EIA.

Additional project types[14]

By comparing project types included in the Czech Law on EIA with the EIA Directive's project types the following additional project types have been implemented:

- Crematoriums ✓/S
- Production of construction materials and products ✓/S
- Production of soaps, detergents and coatings ✓/S
- Production installations for non-alcoholic beverages ✓/S
- Yeast plants ✓/S
- Construction of underground spaces for the storage or location of technological facilities (operations) ✓/S
- Sports grounds, golf courses, motor cross, cycle cross and cycle trial grounds outside of areas protected pursuant to special legal regulations ✓/S

2.1.2.3 France

France is probably the EU country where EIA first appeared. EIA regulations date back to 1976 with the enactment of the *Law on the Protection of Nature* and of its decree of application[15] one year later (*Decree 77-1141* of the 12th October 1977) so that, when EIA Directive was first proposed, France already had an operational EIA system (Sánchez, 1993 and Glasson & Bellanger, 2003).

In spite of having been introduced earlier in France, the EIA Directive was only ratified in 1993 by *Decree no. 93-245* (see Figure 27) amending Decree no. 77-1141. The main piece of legislation is the Law for the Protection of Nature, although the Law relating to Classified Installations (LCI) plays also an important role as far as environmental licensing is concerned.

10 Jul. 1976 Law no. 76-629 on the Protection of Nature
19 Jul. 1976 Law no. 76-663 related to Classified Installations
21 Sept. 1977 Decree no. 77-1133 related to Classified Installations
Decree no. 77-1134 related to the List of Classified Installations
12 Oct. 1977 Decree no. 77-1141 implementing art. 2 of the Law no. 76-629 on the Protection of Nature
25 Feb. 1993 Decree no. 93-245 related to EIA and the implementation of the public enquiries
9 Jun. 1994 Decree no. 94-484 amending decree no. 77-1133 related to Classified Installations
30 Dec. 1996 Law related to the Air and the Rational Uses of Energy

Figure 27 French Legislation on EIA, Source Glasson & Bellanger, 2003

Complying with both the *Law on the Protection of Nature* and the *Classified Installations Law for the Protection of the Environment* (1976), the licensing of industrial activities requires that a public

[14] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

[15] Laws in France are subjected to a decree of application issued by the Government (Sánchez, 1993)

inquiry is part of the EIA procedure (EIA is also needed for the procedure of Public Utility). However, EIA corresponds basically to the wording on an EIS to be delivered along with a risk assessment study and a third document relative to sectoral terms and specifications. So, in France, EIA refers more to a document than to a procedure, when compared to EIA administrative practice in other MS (Glasson & Belanger, 2003).

Screening

The field of application of EIA is *a priori* unlimited. Article 2 of *law 76-629* (Law on the Protection of Nature) provided that the decree would simply fix "*the restrictive list of the work which, because of the weakness of their effects on the environment, is not forwarded to the procedure of the impact study*". The impact study is thus the rule and the exemption the exception, which is confirmed by the statement of Article 1 of decree 77-1141 according to which "*the realization of installations or work gives place to the development of an impact study, except in the cases aimed to article 3*".

Article 3 of Decree 77-1141 states that

A. *Maintenance and extensive repair works are exempt*

B. *The projects listed in Annexes I and II are exempt from EIS procedure, under the compliance of article 4 conditions (different for each Annex project list) and according to the threshold values indicated in each case* and

C. *The projects with a total cost below 1,9 million Euros are exempt from the EIS procedure. Nevertheless, an EIS procedure must be performed, independently of the cost, for those projects listed in Annex III.*

The exemption from EIA of the project types included in Annex IV, according to paragraphs B and C of article 3, requires the preparation of a *Notice* on the probable environmental effects and specific conditions under which the project is expected not to have significant effects on the environment (article 4 of Decree 77-1141).

As for *the rule*, some projects require a full EIA while others, likely to have minor environmental impacts, only require an *environmental impact notification* (*Notice d'impact sur l'environnement*).

The projects that are subject to a full EIA are split into three groups: Group 1's projects always require EIA; Group 2's projects only require EIA when a technical threshold value is exceeded and for Group 3' projects EIA is required only when a financial threshold value is exceeded[16].

Additional project types

It has not been possible to compare the national list of project types with the Directive's Annexes because of language barriers.

[16] 1,9 million euros, which includes both the cost of the development cost and the price of the land (Glasson & Bellanger, 2003)

2.1.2.4 Germany

In Germany, Environmental Impact Assessment is an integral part of the licensing/permitting procedure for each project type. The Act on Act (BGBl. 2005 p. 1757)[17] is the main EIA legislation at national (federal) level and entered into force firstly in 1990. This Act defines the obligations for a mandatory EIA or for an EIA Screening for most of the projects subject to EIA and contains provisions on the minimum requirements of the EIA procedure. Due to the legislative competencies of the German states (the Länder) that are based on the German constitution the 16 German states had to enact specific EIA regulations concerning some of the types of projects subject to EIA.

In addition several laws and regulations contain provisions on the licensing/permitting procedure for the projects subject to an EIA as well as provisions on the requirements for the license/permit, monitoring etc. These legislative acts usually contain links to the relevant EIA legislation.

Environmental Impact assessment Act (Gesetz über die Umweltverträglichkeitsprüfung – UVPG) as published in the announcement of 25 June 2005 (BGBl. I p. 1757)

Figure 28 German most relevant legislation concerning EIA practice

As well included in the Federal EIA Act are provisions on the strategic environmental assessment of plans and programmes.

An exception to the general EIA procedure as defined in the EIA Act, is the possibility to carry out an EIA without a public hearing during the consultation phase for some project types that require a two step development consent procedure with EIA.

Screening

Annex I to the EIA Act lists project types according to a two-column table. Projects above specified threshold values require EIA in all cases (marked with an “X” in column 1) while, below those mandatory thresholds a *general* (case-by-case) screening (marked with an “A” in column 2) and/or or *site-related* screening (marked with an “S” in column 2) procedures must be performed.

In general screening procedures the competent authority has to use the screening criteria set in Annex 2 to the EIA Act for its decision, if the project may have significant environmental effects (article 3c paragraph 1 sentence 1 of the EIA Act). For smaller projects (below general-screening-procedures’ threshold values) a site-related screening procedures must be carried out. This means that the authority has to examine in a first step, if the site of the proposed project is in or close to an ecologically sensitive area. If the answer to this question is positive, the screening criteria in Annex 2 of the EIA Act must be applied.

Furthermore, according to article 3b (2) of the EIA Act, projects of the same type which are to be executed by the same developer or are closely related[18] and which, together, reach or exceed the mandatory thresholds set in Annex I must be subject to an EIA procedure. Via article 3c this

[17] Gesetz über die Umweltverträglichkeitsprüfung – UVPG

[18] Projects are considered to be closely related if (1) they are situated (…) on the same operating or construction site and are connected with common operating or constructional facilities, or (2) (…) there is a close spatial connection between them, and if they serve a comparable purpose.

provision must also be applied on projects that together reach or exceed the screening thresholds set in Annex I of the EIA Act.

According to article 3(1) of the EIA Act, the federal Government may include projects into Annex I, as to they are considered likely to have significant environmental impacts. Projects can only be excluded from Annex I in accordance with legislation of the European Union. According to paragraph (2) of article 3, an exemption of the EIA procedure or parts of the EIA can be granted on a case-by-case-basis for projects, which serve national defense purposes, if the EIA could have an adverse effect on these defense purposes.

Additional project types[19]

By comparing project types included in national Germany EIA acts with the EIA Directive's project types the following additional project types have been implemented:

- Construction and operation of an installation for the biological treatment of waste requiring special monitoring, to which the provisions of the Product Recycling and Waste Management Act ✓/A,S
- Construction and operation of an installation for vulcanising natural or synthetic rubber using sulphur or sulphur compounds, ✓/S
- Construction of a maglev route with the associated operating facilities ✓/A
- Construction of community and public facilities within the meaning of the Land Consolidation Act *[Flurbereinigungsgesetz ✓/A,S*

2.1.2.5 Latvia

Former USSR's SER and OVOS systems played an important role in EIA regulations and practice development in Latvia. EIA regulations were enacted at national level under Nature Conservation laws and are applied under land-use licensing procedures (EIA Centre,1996 and Rzeszot, 1999). Besides, the need for official EIA expertise for the wording of the state EIA reports (only the staff of the Regional Environmental Boards and the members of the State Environmental Expertise are acknowledged for the task) is another feature inherited from the former SER system.

In Latvia, the EIA Directive is implemented at national level through the Environmental Impact Assessment (EIA) Act 1998 (amended in 2001, 2003, 2004) and secondary legislation – Cabinet of Ministers Regulations No 87 of 17 Feb. 2004 on procedure for conducting EIA. These Regulations contain more detailed provisions on application and screening requirements, scoping stage, public participation procedure, EIA reports content, its drafting and evaluation procedure (see Figure 29).

Law on State Ecological Expertise (1990)
1998 Law on Environmental Impact Assessment as amended in 2001, 2003 and 2004
The Cabinet of Ministers regulation No 87/2004 on procedure for conducting EIA

Figure 29 Main Latvia's EIA legislation documents; Source: Rzeszot, 1999 and www.vidm.gov.lv

[19] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

Screening

In Latvia screening is made through the use of positive lists with thresholds and case-by-case examinations. Similarly to the EIA Directive[20], there are two lists. Projects from the first list are subject to mandatory EIA when reaching or above specified thresholds. Below the threshold value indicated in Annex 1 a screening shall be done using screening criteria mentioned in the Article 11 of EIA Act. For projects with no identified threshold value EIA is always mandatory.

Project types from the second list (Annex 2) above specified threshold values are subject to an *Initial Assessment* (case-by-case screening procedure) in order to determine the need for EIA. This initial assessment lies in the Regional Environmental Boards' responsibility but the final EIA decision is made by the State Environmental Bureau upon the results of the preliminary assessment. For those Annex 2 projects for which no threshold value has been enacted, screening shall always be made.

In the Latvian Annex 2 project list, additional project categories have been added and threshold values are identified for almost all project categories.

There is also the possibility for assessing not listed project types on a case-by-case basis, whenever likely to have significant impacts on the environment. In this cases the same initial assessment procedure is applied. A developer may always consult the local regional environmental board and ask its opinion on whether an initial assessment might be necessary for a project not falling under any of Annex 1 or Annex 2 project categories.

Additional project types[21]

By comparing project types included in national Latvia EIA acts with the EIA Directive's project types the following additional project type have been implemented:

- Projects for introduction of wild species which are not native to the territory of Latvia ✓/A

[20] According to Rezszot (1999) EIA regulations in countries in transition (from Central and Eastern Europe) have been the result of the combined influence of centrally planned economy and decision making inherited from the former Soviet Union administrative and political framework, the environmental legislation of the former USSR, especially in what SER and OVOS systems are concerned and the western influence of both the World Bank financial programs and the European Union EIA Directive.

[21] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

2.1.2.6 Poland

1980 Environmental Protection and Management Act
1995 Executive Order on Environmental Impact Assessment
1995 Executive Order on EIA of Toll Motorways
1995 Executive Order on EIA of Local Land-Use Plans
The Environmental Protection Law – Act of 27th April 2001
The Act of 9 November 2000 on Access to Information on the Environment and Its Protection and on Environmental Impact Assessments as amended 2005 (amendment available only in Polish)

Figure 30 Polish main EIA legislation; Source: Rzeszot, 1999

In Poland EIA regulations date back to the 1974 Water Law, according to which authorities were entitled to ask for an environmental appraisal before a water consent was granted (Rzeszot, 1999). Most legislation documents presented in Figure 30 are already the second version of EIA regulations. The 2001 Environmental Protection Law (EPL) Act is the most important one. It contains provisions regarding all environmental issues, defines general environmental policies and asserts specific environmental legislation (Wiszniewska *et al.*, 2002).

The EPL Act transposes Directive 97/11/EEC to Polish Law, taking into account the requirements of the Espoo[22] and the Aarhus[23] Conventions. Part VI [Environmental Impact Assessment Procedure] defines and regulates EIA procedures of both plans and programmes [chapter 1] and proposed projects [chapter 2].

Despite having been enacted under Nature Conservation Laws – as in most Central and Eastern Europe Countries – EIA regulations are applied within land-use planning procedures. EIA is part of the licensing procedure and the regional Body responsible for issuing the construction or operation permit is the EIA authority in each case.

Screening

There are two lists of projects: (1) Group I projects, that may have significant environmental impacts and that should always be subject to an EIA procedure (require an EIA Report in all cases) and (2) Group II projects, subject to an EIA procedure (requiring an EIA Report) according to the results of a (case-by-case) screening procedure.

These two lists of projects, as well as the description of the general screening criteria pertaining to the assessment of Group II Projects are included in a specific Council of Ministers Regulation (Dz.U.04.257.2573**)**, according to article 51 (8) of the EPL Act.

There are different EIA procedures for Group I and Group II project types.

[22] The 1991 UN/ECE Convention on Transboundary Environmental Impact assessment
[23] The 2001 UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental matters

Additional project types[24]

By comparing project types included in the Environmental Protection Law with the EIA Directive's project types the following additional project types have been implemented:

- Stations of wastes trans-shipping ✓/S
- Installations of radio-communication, radio-navigation and radio-locating, emitting field electromagnetic, equivalent force totals ✓/A,S

2.1.2.7 Portugal

The Portuguese Environment Framework Act **(**Law 11/87) already foresaw EIA as an assessment and decision supporting tool before enacting specific EIA legislation in Portugal. The recently published Decree-Law No. 197/2005 is already the third version of EIA regulations in Portugal (see Figure 31 below). It amends the previous Decree-Law 69/2000, the latter enacted for the transposition of Directive 97/11/EC into Portuguese national legislation. Besides some minor modifications to the screening procedure, Decree-Law 197/2005 partly transposes Directive 2003/35/EC on public participation and access to justice in line with the Aarhus Convention.

Environment Framework Act – Law 11/87
Decree Law 69/2000 (amending Decree Law 186/90)
Regulating Decree (Portaria) No. 330/2001
Decree-Law No.197/2005 of 8th November (amending Decree-Law 69/2000)

Figure 31 Portuguese EIA Regulations

Despite being a licensing requirement, EIA is an independent procedure. In the case of industrial activities, it is carried out prior to the IPPC procedure as in these cases the EIA report results are taken into consideration for the IPPC assessment.

Screening

Portugal adopted the thresholds approach for the transposition of Annex II of the EIA Directive. There are two Annexes to Decree Law 197/2005: Annex I lists those projects subject to mandatory EIA in all cases while Annex II projects are subject to EIA above specified threshold values. Stricter inclusive thresholds are applied for projects located in sensitive areas, as defined by article 2. b).

For EIA projects listed in Annex II below defined thresholds the competent licensing authority may decide for EIA when significant environmental impacts are likely, given the projects location, dimensions or general features, according to the screening criteria listed in Annex V to Decree-Law 197/2005. Other projects may as well be subjected to EIA by decision of both the sectoral and the Environment Ministries, according to their judgement of the problable effects on the environment of not listed project types, according to Annex V's screening criteria.

[24] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

Annex I and Annex II projects are subject to different types of EIA procedure regarding mainly the type of information required or time schedules for the several procedural stages (Partidário & Pinho, 2000).

Additional project types[25]

In Portugal Decree-law 69/2000 on EIA, all project types from Directive have been transposed almost by the same words.

To the Annex II 7 project types were added in the portuguese EIA act:

- Installations for the manufacture of particle or fibre board ✓/S
- Golf courses ✓/S

Project type removed from Annex II of Decree-law 69/2000:

- Sludge-deposition sites

2.1.2.8 Slovakia

Figure 32 presents the main EIA legislative documents for Slovakia.

Regulations No 52/1995 on the list of authorized experts for EIA
The National Council of the Slovak Republic Act on Environmental Impact Assessment (No127/1994) as amended by Act 391 of 25th October 2000

Figure 32 Slovak main EIA regulations

EIA is carried out separately from the licensing procedure and so there may be different competent authorities in charge of each process, even though both authorities take part in the EIA procedure (§ 8 of the 1994 Act on Environmental Impact Assessment). The EIA competent authority varies according to the type of project or activity, being most of the times the sectoral Ministry.

Screening

Screening is made through the use of positive lists with thresholds and case-by-case analysis. A two-column table in Annex I of the EIA Act[26] lists projects as subject to mandatory EIA (column A) or assessed on a case-by-case basis according to specified threshold values (column B). Up to a certain dimension a project is screened by means of a preliminary EIA whose results shall then determine whether the project is to be subject to mandatory EIA. Above a certain threshold value projects are subject to mandatory EIA in all cases.

[25] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

[26] The National Council of the Slovak Republic Act on Environmental Impact Assessment – Act 391/2000 of the 25th October

The screening decision concerning column B projects is made by the Ministry of Environment of the Slovak Republic, which takes into account the nature and extent of the project activity, its location, the significance of expected impact, among other provisions set on Annex II to the EIA Act. Criteria for screening are introduced in Annex 2a of the EIA Act.

Additional project types[27]

By comparing project types included in Act of NC SR No. 127/1994 Col. on EIA supplemented and amended by act of NC SR No. 391/2000 Col. with the EIA Directive's project types Slovakia adopted almost all project types from EU Directive 97/11/EEC except of these 2 project types:

- Reclamation of land from the sea; Underground mining
- Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, molos, jetties and other sea defense works, excluding the maintenance and reconstruction of such works

Slovakia has added in its EIA act all project types from international agreements like 96/61/EEC, ESPOO and AARHUS and the following further additional project types:

- Extraction and processing of radioactive minerals including waste banks and settling pits and their recultivation ✓/A
- Use or regeneration of chlorinated hydrocarbons ✓/A,S
- Production of poisons ✓/S
- Impregnation of wood using toxic chemicals ✓/A,S
- Production of fibre-board, chipboard ✓/A
- Production of furniture ✓/A
- Production of building materials including panel production facilities and building products ✓/A,S
- Packaging of resinous mixtures ✓/A
- Machinery or electrotechnical production with production area ✓/A,S
- Polygraphic operations ✓/A,S
- Serial mass-production of foot wear ✓/A
- Installations for revaluation of building waste ✓/A,S
- Crematories and cemeteries ✓/S
- Facilities for repair and maintenance of motor vehicles ✓/A,S
- Installations for radio and television transmitters ✓/A,S

[27] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

- Primary radiolocation installations ✓/A
- Interferences with the landscape, which may cause significant changes in the biological diversity, structure and function of ecosystems ✓/S
- Geothermal water consumption ✓/S
- Military areas and installations for training if they require area ✓/A

2.1.2.9 Sweden

Physical and land-use planning procedures are applied at local level by means of a decentralized rather than hierarchical relationship between local governments and the state. Nevertheless, environmental legislation has been produced at national level.

Besides the Planning and Building Act and the Environmental Code (a framework law), EIA has been implemented through 25 different laws and sectoral regulations concerning the authorization of projects and detailed planning, as is the case of the Electricity Act or the Air Transport Act. General EIA provisions on the specific requirements to be fulfilled by each of these sectoral legislation Acts, as well as the list of projects subject to EIA are contained in the EIA Ordinance. The EIA ordinance has recently been amended. The amendments are included in the Förordningsmotiv Fm 2005:2 and follow from the implementation of the EU "SEA-directive" in the Swedish Environmental Code.

EIA Ordinance (1998: 905)
Swedish Environmental Code (1998: 808)
Förordningsmotiv Fm 2005:2 (amendments to EIA Ordinance)

Figure 33 Swedish EIA main regulations

The aims of the Swedish EIA procedure are presented in Chapter 6 of the Environmental Code. An environmental impact assessment is to accompany an application for a permit relating to environmentally hazardous activity and health protection (chapter 9), water operations (chapter 11), quarrying operations and game enclosures (chapter 12) (MSD, 2000).

Screening

Annex I of the ordinance lists those projects subject to mandatory EIA according to certain threshold values. Below the threshold values indicated in Annex I a case-by-case analysis should be performed based on the screening criteria referred in Annex III of the ordinance.

The EIA Directive's Annex II has not been transposed to Swedish EIA legislation. All these project developments must be screened for EIA by decision of the County Administrative Boards. Annex I transposition resulted in a list of projects quite different from the Directive's both in terms of the types of projects included and the threshold values assigned to most project categories: the Swedish list extends considerably Annex I (additional categories have been added) and threshold values are usually stricter (lower) than the Directive Annex I's.

2.1.2.10 United Kingdom

EIA was initially implemented as a response to the European Community legal obligations (Bond, 1997). The Government aimed initially at implementing the EIA Directive (Directive 85/337/EEC) within the long-existing planning system, which proved impossible once several project types subject to mandatory EIA according to the Annex I of EIA Directive fell outside existing planning legislation (Bond, 1997). As a result, the UK implemented Directive 85/337/EEC through a number of sets of regulations, plus a number of amending regulations and associated measures. These relate to all Annex I projects and those Annex II projects likely to give rise to significant environmental impacts. The majority of the project categories listed in Annex I, and of the project categories and sub-categories listed in Annex II, are covered by regulations under the land-use consent system, but certain project categories and sub-categories are covered by other regulations (e.g. afforestation, major roads).

Figure 34 shows the main regulations under which the EIA Directive has been implemented.

Town and Country Planning EIA (England and Wales) Regulations 1999 (SI 1999 No.293)
Town and Country Planning EIA (England and Wales) (Amended) Regulations 2000
Environmental Impact Assessment (Scotland) Regulations 1999
Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 1999 (SR No. 73)

Figure 34 Main UK's EIA Regulations

Under these regulations, a Local Planning Authority (LPA) is not allowed to grant planning permission for EIA development unless it has first taken the environmental information arising under the EIA process into account (Bond,1997).

Screening

As far as screening methods are concerned, UK legislation follows closely the EIA Directive (DETR, 1999; DETR, 2000; Bond, 1997).

Screening is made through a combination of positive lists with thresholds and case-by-case analysis (Barker & Wood, 1999 and Weston, 2000) . All UK's regulations, where appropriate, have two lists of projects similar to Annexes I and II of the EIA Directive, namely schedule 1 and schedule 2.

EIA is compulsory for Schedule 1 projects and schedule 2 projects which meet the relevant screening criteria or exceed a certain threshold value (unless they are located in a legally defined sensitive area) have to be screened for the need for EIA. Each Schedule 2 project has to be screened on a case-by case basis. Every project has its associated "exclusive" threshold below which EIA cannot be required by a local planning authority, although special provisions exist where projects below these thresholds can, in exceptional circumstances, require EIA. These threshold values are not prescriptive (Weston, 2000). It is up to LPA to decide whether a certain project development should be subject to an EIA procedure or not.

According to Weston (2000), while threshold values can guide the selection of those schedule 2 projects that should be assessed for EIA, much of screening practice still relies upon professional judgement and experience of the LPA.

A developer may ask the local planning authority to give its opinion on which Schedule the project falls under. If in the LPA's opinion it falls in Schedule 2 then the authority must decide whether its likely effects require environmental assessment. When doing so the authority shall take into account the selection criteria set out in Schedule 3 to the Regulations, and also official guidelines (see Figure 37 on page 76).

A developer may appeal against a decision of the planning authorities by an application to the Secretary of State. The Secretary of State has the power to direct that an environmental statement be submitted even if no application is made to him for direction (Wood & Becker, 2005).

Once it has been decided than an EIA is required, the developer may ask the local planning authority for their written opinion as to the information to be provided in the environmental statement (Scoping Opinion).

Additional project types[28]

By comparing the project types presented in the Scoping guidelines for the Environmental Impact Assessment of projects (May 2002) published by the Environmental Agency of England and Wales with project types listed in Annex I and Annex II of the EIA Directive the following additional categories are addressed. (There is not clear whether these are project types for screening or assessment):

- Demolition and decommissioning work ✓
- Redevelopment and clean-up of contaminated land ✓
- Vegetation management and conservation enhancements ✓
- Control of pest species, including disease vectors ✓
- Deliberate introduction of non-native and genetically modified species ✓
- Intensive horticulture, including greenhouses ✓
- Sea outfalls ✓
- Petro-chemical industry – offshore developments, including exploration ✓
- Restoration of mineral extraction sites ✓
- Business parks (i.e. office buildings or repairs or servicing facilities) ✓
- Angling and sport fishing, including fish stocking ✓
- Industrial estates for light manufacturing ✓
- Kennels, catteries and stables ✓
- Vehicle parks and park-and-ride schemes ✓

[28] The symbols beside the listed additional project types mean:
✓/S: Screening procedure;
✓/A: Mandatory assessment; and
✓/A,S: both.

2.1.2.11 USA

The National Environmental Policy Act (NEPA), first enacted in 1969, was the first environmental law assigning the environmental assessment (EA) of projects as an innovative tool for environmental management and protection.

Laws and Executive Orders
National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et seq.)
NEPA Implementing Executive Order 11514 (3 CFR, 1966-1970 Comp., p. 902) as amended by Executive Order 11991 (3 CFR, 1977 Comp., p. 123)
Implementing Regulations of the Council on Environmental Quality (40 CFR parts 1500-1508).
Regulations
24 CFR Part 50 – Protection and Enhancement of Environmental Quality
24 CFR Part 51 – Environmental Criteria and Standards
24 CFR Part 55 – Floodplain Management
24 CFR Part 58 – Environmental Review Procedures For Entities Assuming HUD Environmental Responsibilities
36 CFR Part 800 – Protection of Historic Properties

Figure 35 USA main EA Laws and Regulations

NEPA is a declaration of the environmental policy and goals of the USA. Title II of NEPA created the Council of Environmental Quality (CEQ) to act as an advisor to the President of the USA on environmental matters as well as to coordinate the National Environmental Policy implementation through, for instance, the preparation of guidance (*Regulations implementing the Procedural provisions of the National Environmental Policy Act, 1978*). CEQ must also present to the President an annual *Environmental Quality Report*, accounting for the environmental conditions nationwide.

According to section 102 (C), federal agencies shall include in any new *proposal for legislation or federal actions significantly affecting the quality of the human environment,* a detailed statement on (i) the environmental impact of the proposed action, (ii) reference to any adverse environmental effects that cannot be avoided in any case should the proposal be approved, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity and (v) any irreversible and irretrievable commitments of resources exploited should the action be implemented (reference to the NEPA and CEQ regulations).

Screening

Even though the NEPA process applies only to federal project developments, many private projects may be assessed by means of federal licensing authority, regulatory decision or funding (Clark & Richards, 1999; Steinmann, 2001).

There are three possible types of assessment: (i) *categorical exclusion*, (ii) *Environmental Assessment* (EA) and (iii) *Environmental Impact Statements* (EIS) (Burris & Canter, 1997; Clark & Richards, 1999; Steinmann, 2001).

Categorical exclusion refers to a category of projects regarded as not likely to have significant adverse effects on the human environment. However, project types such as military actions may be exempt from NEPA even though being likely to cause significant adverse impacts.

In this sense, regarding the NEPA process, if a given project development has previously been classified as categorical excluded, it is subjected to public review and comment by the federal agency responsible for the project or by the *Lead Agency*[29] if "*more than one federal agency (1) proposes or is involved in the same action or (2) is involved in a group of actions directly related to each other because of their functional interdependence or geographical proximity*" (sec. 1501.5(a) of the CEQ Regulations). As far as the project's exclusion is confirmed, no other documents are required by either the NEPA or the CEQ regulations.

If the project is not categorically excluded, the lead agency determines whether an EA or an EIS should be carried out.

Environmental Assessments (EA) are preliminary studies aiming at determining the significance of expected environmental impacts. If no significant impacts are identified, *findings of no significant impacts* (FONSI) are prepared, and the NEPA process is completed. Otherwise, a more detailed assessment is needed and an Environmental Impact Statement (EIS) is prepared (Burris & canter, 1997 and Clark & Richards, 1999).

In practice, for those projects more likely to have adverse environmental effects, EIS are seldom proceeded by an EA, given the lead agency experience regarding environmental assessment (Clark & Richards, 1999).

Project types subject to EIA

NEPA is a federal law covering actions done under federal regulations. Additionally, several states established their own EIA-regulation, especially California, Montana, Washington BC, Massachusetts and New York have a comprehensive approach on EIA covering public and private actions that affect the environment.

Concerning the federal legislation, each federal agency has to decide on a case by case examination (= environmental assessment – EA) whether an EA has to be conducted. Additionally, each federal agency has set up a list of projects that are categorically excluded from an EA.

2.1.2.12 Canada

As in the USA, Environmental Assessment in Canada concerns those projects developed by Federal Agencies or under their jurisdiction or funding. It is a decentralized process led by the Federal and provincial governments and laterally by emerging new indigenous constitutional entities (Clark & Richards, 1999 and Paci *et al.*, 2002).

[29] The Lead Agency is the federal agency responsible for the NEPA process. A given federal agency is assigned as a Lead Agency in a NEPA process provided certain criteria are met, such as the agency's dimension and expertise with regard to environmental assessment (Steinmann, 2001).

Canadian Environmental Assessment Act 1992, c. 37 from the 23rd June 1992
Related Regulations:
Canada Port Authority Environmental Assessment Regulations
Comprehensive Study List Regulations
Exclusion List Regulations
Federal Authorities Regulations
Inclusion List Regulations
Law List Regulations
Projects Outside Canada Environmental Assessment Regulations
Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements

Figure 36 Canadian main EA Laws and Regulations

All federal Departments and agencies are subject to the Canadian Environmental Assessment Act (1992, c.37), replacing the previous *Environmental Assessment Review Process* (EARP) *Guidelines Order*, as well as to its implementing regulations.

As legal instruments underlying EIA practice in Canada there are Bilateral Agreements between the federal and provincial governments to coordinate and harmonize EA practice, International Agreements containing EA provisions to which Canada is signatory, varying regulations for those projects outside Canada's jurisdiction, federal coordination regulation intended to coordinate federal authorities' activities regarding EA and specific regulations under the Act (see Table 12) (Clark & Richards, 1999).

Screening

Screening is made according to the provisions of the Act's specific regulations, namely

- The Law List;
- The Exclusion List;
- The Inclusion List and; and
- The Comprehensive List.

The *Law List* includes all those federal statutory and regulatory project approvals which will require an EA, including federal permits, certificates, licenses and authorizations.

The *Exclusion List* concerns the description of all undertakings in relation to a physical work for which an EA is not required because experience suggests that they are not likely to cause significant adverse environmental effects (such as minor renovations and routine maintenance).

The *Inclusion List* specifies physical activities not in relation to physical work (e.g. ice-breaking in the Artic) which are subject to EA because of their potential to cause significant environmental effects.

Finally, the *Comprehensive Study List* describes projects and classes of projects that are likely to have significant adverse environmental effects and therefore require a more in-depth assessment.

EIA practice is administered at federal level by the Canadian Environmental Assessment Agency (CEAA), established by section 61 of the Act. It is up to the CEAA to provide legal, procedural and policy advice to the Minister of the Environment on the Minister's responsibilities under the Act, to ensure public participation in the Federal EA process, and to guarantee sound environmental assessment (EA) practices (Clark & Richards, 1999 and Paci *et al.*, 2002).

According to section 5 of the Canadian Environmental Assessment Act, an EA is required for those projects included in the Law List for which a federal authority (a) is the proponent, (b) provides the financial means for its development, (c) owns the land on which the project is to be implemented or (d) is responsible for the assignment of a permit or licence (CEAA, 2004, Clark & Richards, 1999).

There are four types of assessment recognized under the Act: *screening*, *comprehensive study*, *panel review* and *mediation*[30].

Screenings and *comprehensive studies* imply the assessment of the environmental adverse effects the project is likely to have. Screening is a systematic approach to document the environmental effects and is conducted by the project's responsible authority: if it is determined that no significant adverse effects are to be expected from the project, it may proceed as long as there is no significant public concern about the project. If significant adverse effects that could be avoided (or that cannot be justified) are found, the project is not granted. It must be changed before a new screening procedure is initiated. On the other hand, if it is determined that the project has significant adverse environmental effects, or that it is not possible to properly account for those adverse effects or even if the project has risen a lot of public concern, the process goes on to a panel or mediation for further assessment.

The Canadian Environmental Assessment Act also recognizes *class screenings* as EA tools. A *class screening report* is the result of the accumulated knowledge of the environmental effects of a given project type and identifies the known measures to reduce or eliminate major impacts. However, in applying a class screening report to a project, the responsible authority must still take into account site specific circumstances and cumulative impacts.

Under the Act, a responsible authority can also address the CEAA in order to have a screening report (or reports) declared as a class screening report for future projects. Once approved by the Agency, the class screening report can be used in whole or partly by any responsible authority (Clark & Richards, 1999).

Mediation is a voluntary process aiming at the interested parties[31] agreement on the significance of environmental effects and on the measures needed to be applied in order to lessen or mitigate those adverse environmental effects.

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[30] According to No.2 [Definitions] of the Act,
"*Assessment by a Review Panel*" means an environmental assessment that is conducted by a review panel established pursuant to section 33 [Appointment of Review Panel] and that includes a consideration of the factors required to be considered under subsections 16 (1) [Community Knowledge and aboriginal traditional knowledge] and (2) [Regional Studies].
"*Comprehensive Study*" means an environmental assessment that is conducted pursuant to sections 21. [Public Consultation] and 21.1 [Minister's Decision] and that includes a consideration of the facts required to be considered pursuant to subsections 16 (1) [Community Knowledge and aboriginal traditional knowledge] and (2) [Regional Studies].
"*Screening*" means an environmental assessment that is conducted pursuant to section 18 (whenever a project is not described in the comprehensive study list or the exclusion list made under paragraph 59(c) the responsible authority shall ensure that a screening of the project is conducted and that a screening report is prepared) and that includes a consideration of the factors set out in subsection 16(1) [Community Knowledge and aboriginal traditional knowledge].

Mediation may occur alongside, or instead of, a panel review. The latter primary function is to inform the public of the concerns of all parties (Cole, 1993[32] cited by Paci *et al*., 2002). It is referred to the Minister of Environment, who appoints panel members to conduct public hearings of a project. A panel or mediator submits recommendations to the Minister who referred the project. The Government issues its response to the panel recommendations after review by the Cabinet (Clark & Richards, 1999).

2.2 Relevant guidelines

2.2.1 European level

EIA – Guidance on Screening – 2001

The aim of the guidance is to provide practical help to those involved in Screening and Scoping stages in the EIA process. The EIA-Guidance consist of the two parts:

- Screening and Scoping Guidance; and
- EIS Review Guidance

The task of the Screening and Scoping Guidance is to provide support for the decision if a certain project shall be subject to an Environmental Impact Assessment (EIA). It also shall provide assistance with the preparation of terms of reference for the studies that are required in an EIA-process. Thus the main objective of the Screening and Scoping Guidance is that the respective EIA process starts off on an optimal footing.

The EIS Review Guidance aims to help developers and their consultants prepare better quality Environmental Impact Statements (EIS) and competent authorities and other interested parties to review them more effectively, so that the best possible information is made available for decision making.

The Guidance is designed principally for use by competent authorities, developers and EIA practitioners in the European Union Member States and Accession Countries. It is hoped that it will also be of interest to academics and other organisations who participate in EIA training and education and to practitioners from around the world.

The Guidance has been designed to be useful across Europe. It cannot reflect all the specific requirements and practice of EIA in different countries. It also cannot substitute for Member State guidance on EIA which should always be referred to first. It should also always be read in conjunction with the Directives and with national or local EIA legislation, as detailed legal requirements vary throughout the Member States and Accession Countries.

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31 "Interested party" means, according to No. 2 of the Act [Definitions], any person or body having an interest in the outcome of the Environmental Assessment (EA) for a purpose that it is neither frivolous nor vexatious.

32 Cole, D. (1993): First Nations' environmental assessment guide, first draft. Prepared for the Assembly of First Nations, Environment Unit, Ottawa (unpublished)

The Guidance has been prepared by Environmental Resources Management (ERM) under a research contract with the Directorate General for Environment of the European Commission.

Guidelines on the Assessment of Indirect and Cumulative Impacts as well as Impact interactions – 1999

The aim of these Guidelines is to provide guidance on practical methods and approaches to assess indirect and cumulative impacts of a project as well as impact interactions. The Guidelines are mainly designed to assist EIA practitioners in developing an approach which is appropriate to a project, and to consider these impacts as an integral part of the EIA process. They give advice to a wide range of projects on

- how to approach these kinds of impacts during the various stages of EIA;
- how to adapt the approach to a specific project; and
- suggests methods and tools for identifying and assessing indirect and cumulative impacts, as well as impact interactions.

Guidance on the practical application of the ESPOO Convention – Guidelines on good practice and on bilateral and multilateral agreements

This guidance document has been written for competent authorities in the Parties to the Convention. It provides hints and suggestions that can improve the practical application of the Convention and that may be used in forming bi- and multilateral agreements among Parties that have to deal with transboundary impacts on a regular basis.

The overall approach taken in this guide is that the application of the Convention can and preferably should be part of a systematic way of managing international environmental requirements.

In practice this means that all procedural stages should be documented and that clear responsibilities guide focuses on issues that have been identified to in advance for all the stages of the application of the Convention.

Specific methodologies and criteria to determine the significance of adverse transboundary impact (1995 report, CEP/WG.3/R.6), UNECE

The guideline aims to specify ways and means of determining the issue of the significance of an impact in the transboundary context. It emphasises the early determination of significance, which precedes the notification from the country of origin to the affected country.

It contains four Annexes:

- A possible structure for listing and identifying impacts is given in Annex I. It attempts to clarify whether transboundary impacts are possible or not;
- Annex II provides a tool to assemble relevant factual information on the characteristics of transboundary impacts;
- Annex III provides preliminary criteria for determining the "significance" of the impacts, including the situations in which the affected country should always be notified. Annex III also refers to situations in which the decision on significance depends on several characteristics of the impacts or the affected area. As more experience is gained of the actual impacts of activities listed in Appendix I to the Convention, this part of Annex III

could be developed further to give more precise activity-specific criteria for determining the significance of an impact; and

- Annex IV contains a questionnaire on past experience with transboundary impacts of activities listed in Appendix I of the Convention.

Assessment of plans and projects significantly affecting Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC

The Procedure of impact assessment under the Habitats Directive 92/43/EEC is geared to the methodological guidance on the provisions of Article 6 (3) and (4) (http://europa.eu.int/comm/environment/nature/nature_conservation/eu_nature_legislation/specific_articles/art6/pdf/natura_2000_assess_en.pdf)

From developing practice in the European Member States and some advice set out in the Commission's services' interpretation document "Managing Natura 2000 sites" it has been generally accepted that the assessment requirements of Article 6 of the Habitats Directive 92/43/EEC establish a stage-by-stage approach. The stages proposed by the guidance document are:

1. Stage one: Screening – *the process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;*
2. Stage two: Appropriate assessment – *the consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;*
3. Stage three: Assessment of alternative solutions – *the process which examines alternative ways of achieving the objectives of the project that avoid adverse impacts on the integrity of the Natura 2000 site;* and
4. Stage four: Assessment where no alternative solutions exist and where adverse impacts remain – *an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interests, it is deemed that the project should proceed.*

Guidelines on Impact Assessment under the Convention of Biological Diversity

Impact assessment processes are in place and applied in many countries, however biodiversity considerations are often inadequately addressed. There is a growing recognition of the need to better reflect biodiversity considerations in impact assessments. To overcome existing barriers to the incorporation of biodiversity in impact assessment, guidelines have been developed to assist Parties in incorporating biodiversity-related issues into environmental impact assessment and strategic environmental assessment legislation and procedures (decision VI/7 Part A). They were prepared in collaboration with the International Association for Impact Assessment (IAIA) and other relevant organizations and emphasize the importance of integrating biodiversity considerations in the screening and scooping stages of EIA. Based on case studies and experiences made with their application, these guidelines are currently being further developed to fully address all stages of EIA and SEA (http://www.biodiv.org/doc/decisions/COP-07-dec-en.pdf).

To ensure that projects and programmes with a potential impact on indigenous and local communities undergo an appropriate impact assessment process, the Akwé: Kon voluntary guidelines for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities (decision VII/16 Part F) have been prepared by the Open-ended working group on Article 8 (j). This should be seen as complementary to the guidelines on incorporating biodiversity-related issues into EIA and SEA (http://www.biodiv.org/doc/ref/tk-akwe-en.pdf).

2.2.2 National/regional level

Almost all EU countries have general guidelines on environmental assessment procedures, some of them (e.g. France, Italy, Ireland, Spain, Sweden and the UK) sectoral ones (Glasson & Bellanger, 2003).

Guidelines particularly focusing on the screening procedure seem to be more common in those countries with a more frequent use of discretionary judgement by the EIA authorities in the screening phase of the EIA process or with more decentralized EIA regulations, as it is the case in the UK or in the United States of America.

Being practically impossible to account in this Report for all screening guidance existing in the EU Member States as well as in Canada and USA, Figure 37 presents a summary of some guidelines focusing on screening procedures for several countries.

Country	Guidelines
Austria	Guideline for case-by-case examinations (Leitfaden Einzelfallprüfung) Author: Federal Ministry of Agriculture, Forestry, Environment and Watermanagement Year: 2001 Circular on the enforcement of the Environmental Impact Assessment Act UVPG 2000 Author: Federal Ministry of Agriculture, Forestry, Environment and Watermanagement Year: 2001 (presently under revision) Circular on the enforcement of the Environmental Impact Assessment Act UVPG 2000 in conjunction with the Federal Roads Devolotion Act Author: Federal Ministry of Agriculture, Forestry, Environment and Watermanagement Year: 2002
Canada	Reference Guide: Determining Whether A Project is Likely to Cause Significant Adverse Environmental Effects Author: Canadian Environmental Impact Assessment Agency Year: 1994
Germany	General Administrative Guidelines on the Execution of the Environmental Impact Assessment Act of 18.09.1995 (Allgemeine Verwaltungsvorschrift zur Ausfuehrung des Gesetzes ueber die Umweltvertraeglichkeitspruefung – UVPVwV) Guideline for the preliminary examination of a specific project on the duty to perform an EIA (Leitfaden zur Vorprüfung des Einzelfalls im Rahmen der Feststellung der UVP-Pflicht von Projekten, Endfassung vom 14.08.2003) Author: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Year: 2003 Guideline Interpretation and Application of the new EIA-rules (Leitfaden Anwendung und Auslegung der neuen UVP-Vorschriften, Endfassung vom 14.08.2003) Author: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Year: 2003
Ireland	Environmental Impact Assessment (EIA) Guidance for Consent Authorities Regarding Sub-threshold Development Government of Ireland Year: 2003
Lithuania	Manual for Environmental Impact Assessment in Lithuania Authors: Ministry of the Environment of the Republic of Lithuania Year: 2001
Poland	Handbook on Environmental Impact assessment Procedures in Poland Authors: Beata Wiszniewska, John Farr and Jerzy Jendróska.

Country	Guidelines
Portugal	Guia de apoio ao novo regime de Avaliação de Impacte Ambiental (*Guide to the new EIA system*) Authors: Maria do Rosário Partidário and Paulo Pinho Year: 2000
Slovakia	Posudzovanie vplyvov na životné prostredie I,II *(Environmental Impact Assessment, EIA law with comments to EIA process with recommended practice*) Authors: Mária Kozová, Ján Drdoš, Katarína Pavlíčková, Štefan Úradníček, Viera Husková a kolektív Year: 1995
UK	England[33]: Circular 02/99, Environmental Impact Assessment Authors: Office of The Deputy Prime Minister Year: 1999 Environmental Impact Assessment: a guide to procedures Authors: Office of The Deputy Prime Minister Year: 1999 Wales: Welsh Office Circular 11/99, Environmental Impact Assessment Scotland: Scottish Executive Development Department Circular 15/99, The Environmental Impact Assessment Regulations 1999 Northern Ireland: Development Control Advice Note 10, Environmental Impact Assessment Environmental Impact Assessment – Planning Practice Standard Author: The Royal Town Planning Institute Year: 2001
USA	Guidelines for Assessing Environmental Impact Assessments Author: Natural Resources Authority Year: 1997

Figure 37 Screening guidelines among EU MSs, Canada and the USA

In the case of France, all guidelines found were sectoral ones and none pertaining in particular to screening procedures and thus not included in the previous table.

2.3 Experiences from previous evaluation studies

2.3.1 EC evaluation of the implementation of the EIA directive in MS

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the Application and Effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC) – How successful are the Member States in implementing the EIA Directive

The survey of the 5-year-report from the Commission sought views inter alia whether the Annex I thresholds were set at the right level or the criteria provided the right trigger for requiring a mandatory EIA. There was some support by the Member States for far more flexibility in the operation of Annex I, so that thresholds could be adapted to suit national circumstances such as the socio-economic conditions of individual countries. Especially for small countries the Directive's thresholds may be seen as high. Furthermore there was some concern that not all of the thresholds are clear or rather there is a need for more appropriate thresholds for certain projects. There was also some consensus regarding further revision of the Annex I+II lists that there needs to be more research on the relationship between the Annexes. To obtain a better understanding how the EIA procedures operate in practice across the EU as a whole the Report mentioned the necessity to analyse the different approaches in the implementation of the Annexes lists. Consequentially there

[33] Both publications are due to be replaced early in 2006.

would be a need to check whether the definitions of Annex I projects types are clear and the thresholds are set at the right level regarding technical criteria. In the scope of this review, the different economic strengths and sizes of the Member States should also be taken into consideration. This is of particular importance for setting proper thresholds in small countries. A better understanding of the practical applications could also lead to suggestions for further adjustment of the two Annexes.

2.3.2 Other relevant sources

IMPEL-report on Interrelation between IPPC, EIA, SEVESO Directives and EMAS Regulation – 1998

The IMPEL report presents the results of the discussion amongst the participants of the IMPEL project: "Interrelationship between EIA, IPPC, Seveso Directives and EMAS Regulation" with regard to the following issues/questions:

- how do the four instruments fit together?
- Are their provisions consistent?
- What kind of information is requested from the developer or the operator when the installation falls into the scope of two or three Directives?
- How should the obligation to inform and to involve the public be dealt with?
- Is it possible to have a single permitting procedure which is consistent with the requirements of all three Directives?
- Finally, what role can EMAS play in this context?

The answers to these questions given in the report may be of help for experts involved in an EIA process, especially with regard to the evaluation of expected environmental impacts.

The report has been compiled in a series of four workshops organised by Italy as ‘lead country’ in the years 1997/98.

Evaluation of the performance of the EIA process – 1996

This report presents the results of an evaluation of certain aspects of the performance of the environmental impact assessment (EIA) process within eight Member States of the European Union. It deals with the quality of EIA reports, with modifications of projects as a result of EIA, and with the influence of changes to EIA procedures.

2.4 Conclusion

The field of application of the EIA Directive is very broad and essentially covers all the categories of projects likely to have significant effects on the environment. Other Directives related to the EIA Directive foresee approval procedures for certain types of activities or apply when certain criteria is met. The overall purpose of environmental related Directives is generally meant to guarantee a high level of environmental protection across the EU Member States. Comparing the listed project types in environmental related Directives, revealed that the categories which are determined to have likely significant impacts overlap to a large degree with only a few exceptions. The differences lie more in the set of thresholds and criteria, but also in project type descriptions, which makes a direct comparison of the Directives’ Annexes difficult in some cases.

The field of application is indicated for the EIA Directive by Annexes I and II, whereas most of the other related Directives only have one single Annex, with project types.

Focusing on the EIA Directive, project types are listed in Annexes I and II. Projects of the classes listed in Annex I require mandatory assessment. Annex II EIA projects must be subject to a screening procedure by Member States to determine whether the Directive applies to them. Different approaches are used to transpose Annex II, mainly because there are different national legal systems and conditions.

A comparison of the screening approaches reveals that most EU countries use case-by-case examiniations as a screening tool. The majority of these States apply case-by-case analysis to one of the following possible cases:

- to projects falling below mandatory thresholds;
- to projects lying in-between inclusion and exclusion thresholds/criteria; or
- to projects included in descriptive lists.

On the contrary, case-by-case analysis is rarely applied in several of the Member States. All of these countries apply EIA regulations at the national level.

Besides the existing Guidelines at the Community level, almost all EU countries have general guidance on EIA procedures. Guidelines focusing in particular on screening procedures could be found for countries with a more frequent use of discretionary judgement by the EIA authority/ies, or with more decentralized EIA regulations.

The research on existing evaluation studies have shown rather poor results. Except for an evaluation of the performance of the EIA process from 1996, only a few other studies could be found, potentially due to the fact that they might not exist in the English language. Another reason could be that each Member State has to inform the European Commission about the national application and it might not be regarded as necessary to engage in further evaluation work.

3 APPLICATION OF EIA IN TERMS OF PROJECTS SUBJECT TO EIA – EMPIRICAL RESULTS AND ANALYSIS OF EIA PRACTICE

3.1 Introduction

This chapter presents the findings from the questionnaires sent to stakeholder in all 25 Member States and the interviews undertaken with selected stakeholders in eleven Member States plus two comparator countries.

Key themes emerging from the questionnaires and the interviews were:

- Mainly positive responses regarding a general satisfaction with
  – the list of project types subject to EIA, with a few exemptions;
  – present screening systems applied;
  – project type descriptions and set of thresholds/criteria;
- Problems with the application of the EIA Directive's Annexes rather lie in:
  – a lack of accurate interpretation of screening criteria;
  – the need for a closer linkage of thresholds/criteria with the actual impacts;
  – need for more guidance as well as more research regarding EIA (screening) practice;
- Some proposed additional project types have been regarded as necessary to add to the EIA Directive's Annex I for mandatory assessment, for other categories specified thresholds/criteria should be set; and
- SEA (Strategic Environmental Assessment) is regarded to become a helpful tool to tackle some gaps and difficulties in EIA procedures, in particular with regard to dealing with cumulative effects such as the assessment of urban development projects.

3.2 Results Questionnaire

3.2.1 Question no 14: Satisfaction with Selection and Description of Project types

Wording of the question

Is the selection and description of project types adopted by your national/regional EIA legislation from your point of view … (Tick all that apply)

☐ … satisfactory and comprehensive

☐ … unsatisfactory with respect to environmental protection, because of ...

☐	too many project types	if ticked, could you specify which ones and why:	
☐	missing project types	could you specify which ones:	
☐	inappropriate project descriptions	if ticked, please give the difficulties in interpretation and name the categories:	
☐	inappropriate criteria	if ticked, please give the main reasons and name categories:	
		☐ different criteria should be used	For category/ies:
		☐ same criteria, but set at a different level	For category/ies:
		☐ other reasons:	For category/ies:
☐	inappropriate set of thresholds	if ticked, please give the main reasons:	
		☐ threshold is not appropriate for the country	For category/ies:
		☐ threshold does not comply with state-of-the-art	For category/ies:
			For category/ies:
		☐ no threshold should be set	For category/ies:
		☐ other reasons:	

☐ I don't know

Underlying intention of the question:

Question no 14 represents a combined question retrieving Stakeholders' opinions about their satisfaction with

- The list of project types covered by their national EIA law regarding a satisfactory coverage of all project types with likely significant effects on the environment;
- Proper criteria to cover these project types;
- The definitions of the listed project types, whether they are clearly delimitable, interpretable and comprehensive enough or eg. leaving an ample scope for interpretation.

The aimed output of the question was to get an impression about the suitability of definitions/thresholds implemented in national/regional law systems such as the satisfaction with the coverage of project types with likely significant effects on the environment. Moreover the feedback should provide for an estimation regarding the general approach within the Member States in using criteria/thresholds to include all relevant categories of projects.

Results

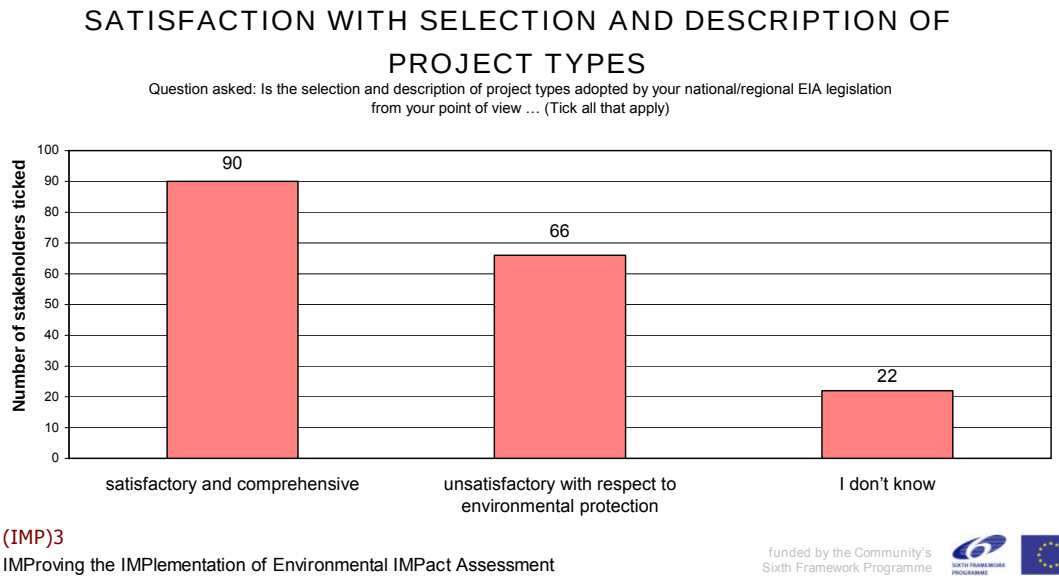

Figure 38 Totals obtained for Question No.14

About 50% of the respondents are satisfied with their national selection and description of project types, whereas about a third of Stakeholders chose the category "unsatisfactory". 12% ticked "I don't know". Setting the 22 unsure respondents aside, 58% of the opinionated respondents were satisfied, while 42% of respondents were unsatisfied.

The given reasons for not being satisfied with the selection and descriptions show generally a quite equal picture, which can be seen in the table below:

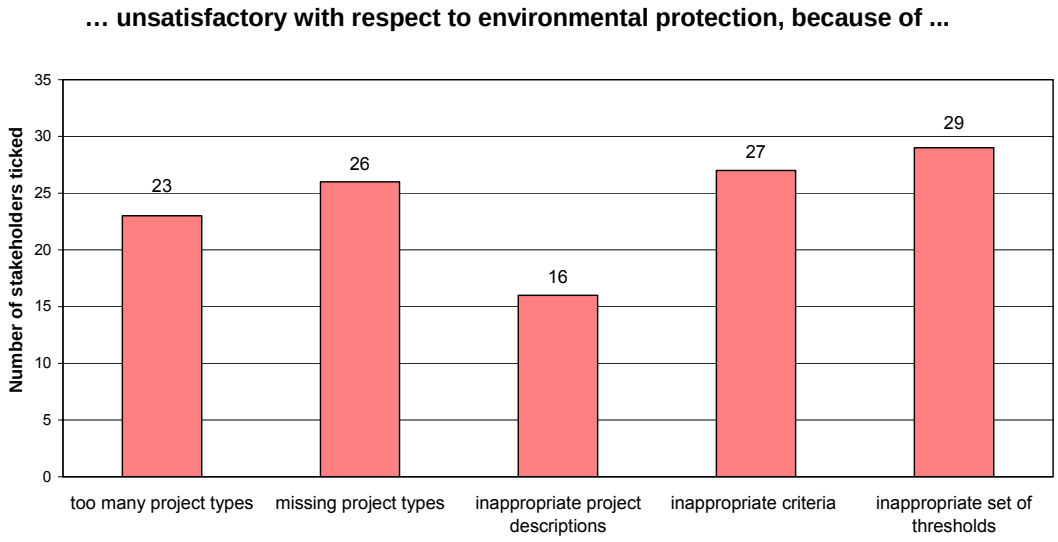

Figure 39 Single analysis for category "unsatisfactory with respect to environmental protection"

From the suggested reasons for unsatisfactory selection and description of project types „inappropriate set of thresholds“ presents the most ticked category whereas „inappropriate project descriptions“ has only been chosen 16 times.

Most of the given remarks according to “**too many project types**” criticized the need of EIA even for small projects with insignificant impacts on the environment. One remark pointed out that EIA should not be mandatory for standard projects where the potential impact is known without detailed assessment. Another feedback claims a generic development of the project list, as “*new types are developed year by year”.*

Under the remarks to “**missing project types**” some additional project types were recommended which should become subject to EIA. Figure 40 shows the categories indicated as missing by some respondents. Other remarks stayed on a more general level, such as that a closed list does not consider local conditions and/or cumulative effects. It was also mentioned that SEA could become an important instrument for eg. assessing impacts of several smaller projects together.

Project type
Dikes and high voltage earth cables
Production of tyres
Gas compressor stations
Marine renewable projects, including test projects
Golf courses
Storage of fireworks
Cable-laying of power lines
Development of former port areas to residential areas
Wild-life stalk along road and railroad networks
Telecommunication and radio pylons
Wind parks

Figure 40 Project types indicated as “missing” in the national/regional legislation

To the category “**inappropriate project descriptions**” the remarks show a wide range of different feedback. On one hand specific project categories were mentioned such as urban development, clear-cutting, waste management projects, shipping lanes, water construction, production and storage of chemicals. A more general remark states that the factor “risk” should be included in the descriptions. Another remark criticizes that descriptions are not satisfactory for projects where a social impact can be reasonably expected to be long-lasting and extensive.

The category “**inappropriate criteria**” has been chosen 27 times. Within this category the possibility was given to specify, why criteria is seen as inappropriate. The table below shows an overview of the results:

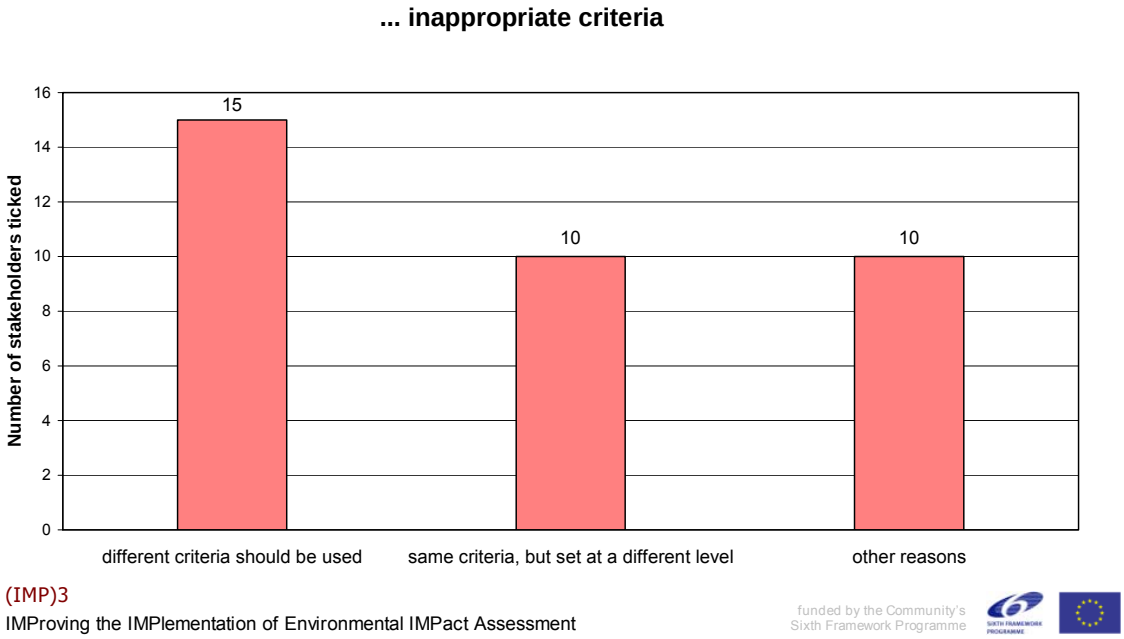

Figure 41 Single analysis for category "inappropriate criteria""

Remarks according to "**different criteria should be used**" mentioned on one hand certain project categories such as ferrous metal processing, production of plastic materials and golf courses. A more general remark mentioned that different criteria would be useful for smaller sources for "without EIA". One respondent also stated that regulations in general are based on development types, not on receptors.

For the category "**same criteria, but set at a different level**" the factors water, resources and noise were indicated such as the project type "windfarms".

Under "**other reasons**" for inappropriate criteria the respondents indicated the project type "construction of airports", a lack of detailed guidance and no available EIA Studies specifications, the difficulty to adapt criteria from national to a regional level and that criteria should be consistent within a Member State. Furthermore one remark recommended a general case-by-case approach.

Within the option "**inappropriate set of thresholds**", which has been selected the most often, the responses show the following distribution:

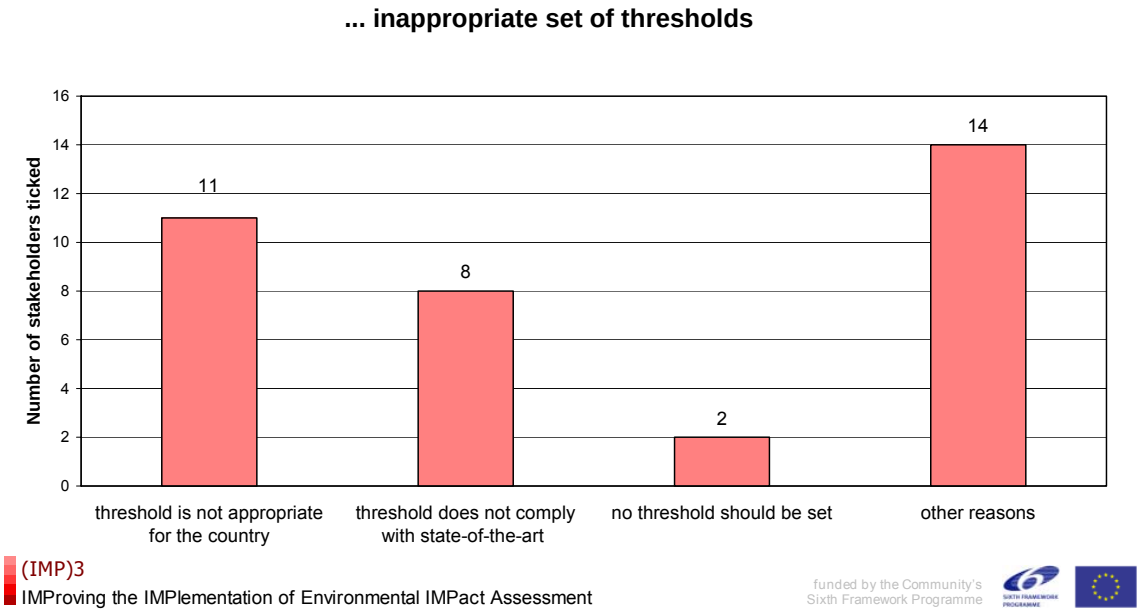

Figure 42 Single analysis for category "inappropriate set of thresholds""

For "**threshold is not appropriate for the country**" the project categories petrol stations, more than 20 garages, all guest houses outside settlements, manufacture of lime and waste management were mentioned.

Under "**threshold does not comply with state-of-the-art**" pig iron production and waste management have been indicated.

Infrastructure projects were given as remark to the category "**no threshold should be set**".

Remarks according to "**other reasons**" comprise eg. mentioning project categories such as Hydro power plants, pig farms, streets and thresholds for sinter or cement. Furthermore a variety of different remarks arrived such as

- *a lack of detailed guidance on thresholds;*
- *regional differences in sensitivity are not considered;*
- *Threshold may apply to all situations;*
- *Thresholds are too high;*
- *Thresholds too low to have significant impact;*
- *You cannot only do it like this, you have to take receptors and work backwards into consideration;*
- *No idea, specific guidance needed – to ensure appropriate removal of hazardous "artefacts"; and*
- *Traffic forecast.*

Interpretation of key results

The objective of question no. 14 was to elicit EIA-experts opinions regarding their satisfaction with the selection and description of project types adopted by their national or regional EIA legislation. As already mentioned questionnaire results were summarized for the entire EU due to sample size, thus not providing for analysis at the country level.

Of the 178 responses, 90 respondents indicated to be satisfied with their national and/or regional selection and description of project categories, 66 are unsatisfied and 22 unsure. Setting the 22 unsure respondents aside, 58% of the opinionated respondents were satisfied, while 42% of respondents were unsatisfied. Owing to the general nature of the question, and the variety between the Member States in terms of EIA application, results were rather positive. Had the wording been more specific, this number would be expected to decrease. Further analysis at the country level would be needed to determine if these results were country specific.

Focusing on the 42 percent of respondents who were unsatisfied, a further series of questions were provided which could be grouped into two main categories:

- project types; and
- inappropriate detail.

Under project types, an almost equal proportion of stakeholders responded that there were too many project types as too few. This is likely a combination of the size of the projects being discussed, the regional or national specifics of the EIA process and perhaps the general governmental stance on environmental issues.

Those who felt that there were too many project types mainly criticized the need for an EIA even for small projects with insignificant environmental impacts. Respondents who felt there were missing project types stated that a standard list does not allow for consideration of local conditions and/or cumulative effects.

Nearly all responses regarding inappropriate descriptions, criteria and/or thresholds mention related project types, but unfortunately neither explaining the difficulties in interpreting certain descriptions nor giving reasons for seeing criteria and/or the set of thresholds as inappropriate.

To the question for which categories respondents feel the project descriptions as inappropriate, the following project types were mentioned: *urban development, clear-cutting, waste management projects, shipping lanes, water construction, production and storage of chemicals*. A need for using different criteria was mentioned for project categories such as *metal processing, plastic production and golf courses*.

Brief abstract of key findings

In summary, results from this survey are at best able only to provide a general overview of the responses to question no 14. It is possible to state that the majority of respondents to the question are satisfied with the selection and description of project types in their national legislation. However, there seems to be a wide variety of reasons why a significant proportion of the respondents are unsatisfied with the current situation in their regions or country. Further work in

this area might include a larger, more detailed survey that captures more detail on the respondent, in particular, an in-depth analysis for those project types where difficulties in interpretation and/or the set of criteria/thresholds seem to occur frequently, such as for the sectors *urban development, waste management and golf courses*.

3.2.2 Question no 15: Additional Project types

Wording of the Question

From your experience: Which additional project types from the list below, that are not yet listed in the EU directive, should be made subject to EIA?
(Tick all that apply and if possible, suggest mode of application)

Project type	Mode of Application
☐ Removal and disposal of asbestos	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Re-gasification projects (transforming gas into liquefied gas for transportation and then re-transforming it into gas for consumption)	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Installations working with Genetically Modified Organisms (GMOs) or pathogenic micro-organism such as laboratories, test facilities, trial areas	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Manufacture of lime	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Mine rehabilitation	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Particle accelerators (of 50 MeV [mega-electron volts] and over)	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Masts for mobile phones and radio or telecommunication stations	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Transhipment depots	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Installations for flood and/or avalanche protection (e.g. torrent control facilities, erosion control regimes,…)	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Installations for the manufacture of particle or fibre board	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Meat processing plants	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Golf courses	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Business parks	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Shooting ranges	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:

Project type	Mode of Application
☐ Military practice grounds	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Redevelopment of contaminated land (e.g. brown fields, …)	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:
☐ Others (please justify):	☐ Mandatory in all cases ☐ subject to a specified criteria/threshold Suggested criteria/threshold:

Underlying Intention of the Question:

EIA experts and stakeholders had the possibility on the basis of their expert knowledge and past experiences to suggest additional project types which are not yet listed in the EU directive and should be made subject to an EIA. Furthermore, they were asked to suggest a mode of application such as which criteria/thresholds to be used.

The overall intention of the question was to get an impression of whether or not EIA experts are satisfied with the coverage of project types listed in their national/regional legislation and if they see a need to expand the list with additional project types. From the feedback it should also be possible to draw consequences about the project lists relative to the EU directive.

Summary of results

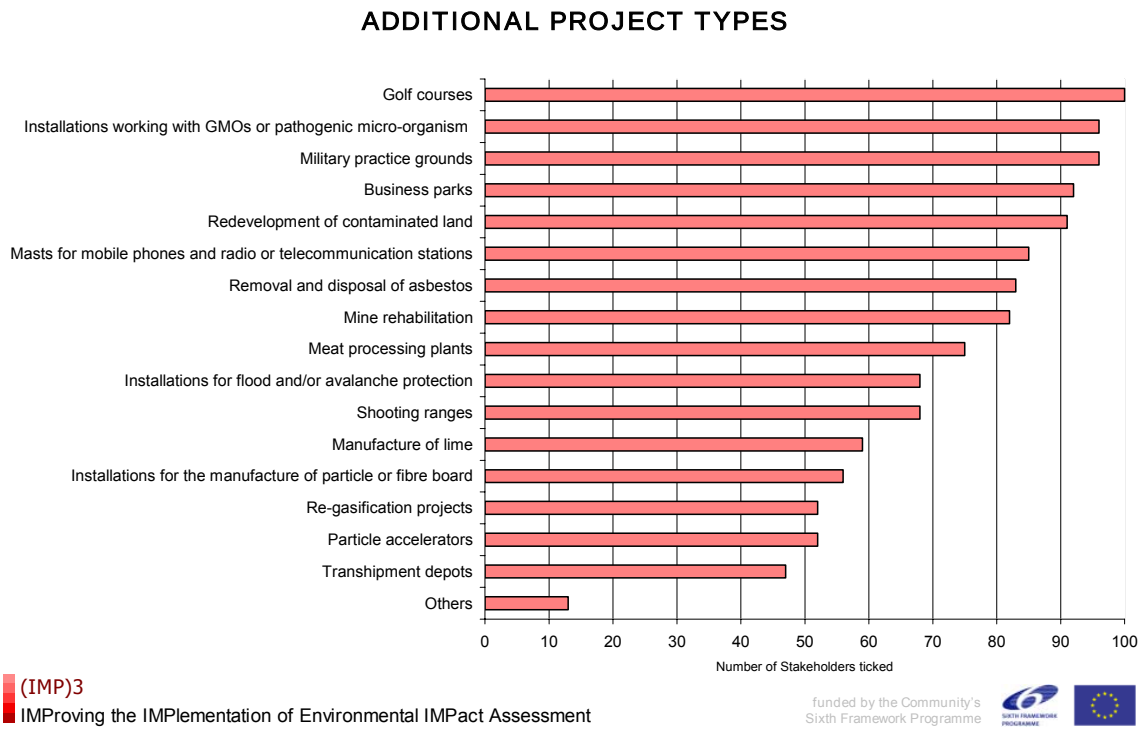

Figure 43 Totals obtained for Question No. 15

Interpretation of key results

3.2.2.1 Results per type of categories of additional project types

According to the results of the evaluation of the questionnaire the most frequently ticked category was *Golf courses*, indicated by 100 respondents from 183 returned questionnaires.

More than 50 respondents indicated:

- Installations working with GMOs or pathogenic micro – organisms (96),
- Military practice grounds (96),
- Business parks (92),
- Redevelopment of contaminated land (91)
- Masts for mobile phones and radio or telecommunication stations (85)
- Removal and disposal of asbestos (83)
- Mine rehabilitation (82)
- Meat processing plants (75)
- Installations for flood and/or avalanche protection (68)
- Shooting ranges (68)
- Manufacture of lime (59)
- Installation for the manufacture of particle or fibre board (56)
- Re-gasification projects (52)
- Particle accelerators (of 50 MeV and over) (52)

49 respondents ticked transhipment depots and 13 indicated other categories. They suggested e.g. the following additional types of projects: *airports, extremely high buildings, artificial turf grass fields and gas compressor stations, major wind farms, production of plastics or plastic products*.

3.2.2.2 Results per suggested mode of application of additional project types
(ticket by more than 50 respondents from 183)

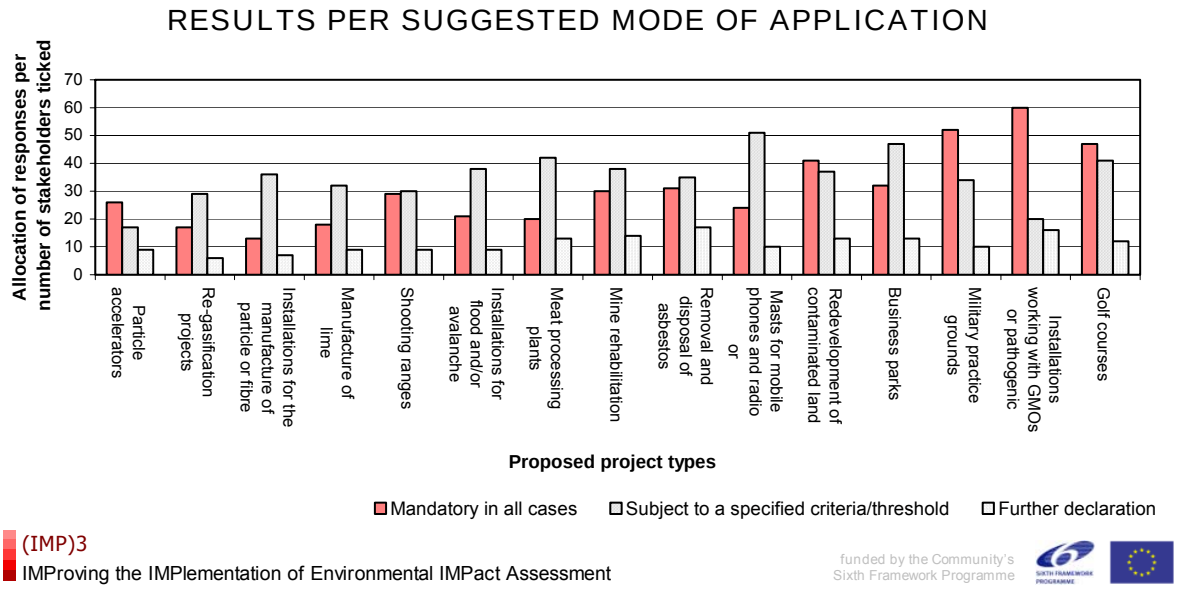

Figure 44 Allocation of answers regarding mode of application of the proposed project types

From the categories which have been chosen by more than 50 respondents the following modes of application were suggested:

50 and more of the respondents required clearly mandatory assessment for the following proposed additional project types:

- installations working with Genetically Modified Organisms (GMOs) or pathogenic micro-organism such as laboratories, test facilities, trial areas; and
- military practice grounds.

Over 40 stakeholders indicated a requirement for mandatory assessment for:

- redevelopment of contaminated land; and
- golf courses.

40 and more of the respondents suggested that the following project types should be subject to a specified criteria/threshold:

- business parks;
- golf courses;
- meat processing plants; and
- masts for mobile phones and radio or telecommunication stations.

The response rate demanding "further declaration" ranges between 1 and 17 for all proposed categories.

In the analysis of the given answers concerning the suggestion of thresholds of additional project types, a wide variation was found in the approach to the suggestion of thresholds. Many stakeholders require an EIA dependant upon size (amount of production, quantity of material to be transported, quantity of material to be manufactured, quantity of material to be processed, quantity of waste and waste water produced, quantity of motor vehicles, etc). There is a great deal of variation among the levels to which some of the thresholds are set. This is very likely regional or nationally dependent, and dependent upon experiences of those stakeholders working in those areas.

Some respondents require an EIA regardless of size, but especially for the location of certain projects in sensitive areas: e.g. masts for mobile phones and radio or telecommunication stations, installations for flood and/or avalanche protection, golf courses, military practice grounds, re-development of contaminated land, etc.

Other respondents suggested using risk analysis for specific project types e.g. removal and disposal of asbestos, manufacture of lime, mine rehabilitation, installation of masts for mobile phones and radio or telecommunication stations, installation for the manufacture of particle or fibre board, military practice grounds and re-development of contaminated land.

The following table summarizes the responses to the proposed project categories, sorted by respond rate.

Project Category	Respond rate	Suggested thresholds/ comments
Golf courses	Ticked by **100** from 183 respondents	*area*
		area and localization in protected areas
		depending on land in-take, quality of land take up and amount of water required
		distance from nearest similar facility – EIA if less than 10 miles from similar facility
		golf courses > 10 ha already need EIA
		in Austria: 10 ha or 1500 motor vehicle sites
		in natural environments
		Mandatory only in protected areas
		over 9 drives
		protected area/50 ha
		threshold
		Water needs
Installations working with Genetically Modified Organisms (GMOs) or pathogenic micro-organism	Ticked by **96** from 183 respondents	*field release/human test facilities*
		threshold
Military practice grounds	Ticked by **96** from 183 respondents	*100 ha*
		20 ha
		25ha
		area, protective areas
		distance to infrastructures such as residential areas or collective buildings or services
		new land uses
		over 100 ha
		Proximity to settlement area, recreational area, size
		Risk analysis

Project Category	Respond rate	Suggested thresholds/ comments
Business parks	Ticked by **92** from 183 respondents	*10 ha*
		area
		area of development
		Business parks > 1000 parking places already need EIA
		Capacity
		depending on size
		dimension
		quantity of motor vehicle sites
		Size, transport infrastructure
		threshold
		traffic (N of cars, garages)
Re-development of contaminated land	Ticked by **91** from 183 respondents	*depending of type of previous activity (whether it required EIA, IPPC and similar permits) and level of contamination*
		protective zones in neighbourhood
		Risk analysis
		size
		threshold
Masts for mobile phones and radio or telecommunication stations	Ticked by **85** from 183 respondents	*... never ending story, EIA cannot solve problems (social acceptance)*
		Across criteria proposed by the relevant EU body
		Damage has already been done regarding landscape issues
		distance to infra-structures such as residential areas or collective buildings or services
		from 500 kW output capacity or capacity over 750 W and frequency over 1 GHz
		from 500 kw output capacity or capacity over 750 W and frequency over 1 GHz
		Height and/or surface area
		in urban area and to 500 m far off one
		layout of the vicinity of masts
		localization in the landscape
		Power
		proximity to sensitive receptor
		Risk analysis
		sensitive areas
		within settlement areas
Removal and disposal of asbestos	Ticked by **83** from 183 respondents	*100 t/a*
		amount of free asbestos fibres > 50 t/a
		demolition of structures listed in Annex 1 or significant risk for Annex 2 structures
		Quantity of material to be removed
		threshold
		to be agreed
		volume
Mine rehabilitation	Ticked by **82** from 183 respondents	*25 ha*
		All underground mines, quarries and open pits according to their size (e.g. area more than 1 ha)
		impact on environment if mine rehabilitation is not carried out
		Mine dimension
		mining activities above threshold already need EIA
		Risk analysis
		threshold
Meat processing plants	Ticked by **75** from 183 respondents	*20 animals/week*
		incoming amount of meat (animals)
		Dimension
		volume put through?
		IPPC threshold or 20000 t/y
		Quantity of material to be processed
		quantity of processed animals
		Quantity of waste and wastewater
		threshold

Project Category	Respond rate	Suggested thresholds/ comments
Installations for flood and/or avalanche protection	Ticked by **68** from 183 respondents	*1 ha* *capital cost* *Cost of works* *flood protection measures already need EIA* *In the UK flood structures already fall under the EIA regulations although thresholds vague* *localization in protected wetlands; protected area, especially Natura 2000, residential areas* *risk* *risk vs. environmental impacts* *size* *size of intervention, sensibility of the concerned area and probability of natural disasters* *size threshold, potential effects on protected sites* *threshold*
Shooting ranges	Ticked by **68** from 183 respondents	*area* *depending on size* *distance to infrastructures such as residential areas or collective buildings or services* *threshold* *when lead ammunition is used, > 50.000 shots/y*
Manufacture of lime	Ticked by **59** from 183 respondents	*1000t* *20 000 – 100 000 t/a* *Capacity* *e.g. 100000 t/a* *from 20 000 ton/year to 100 000 t/a* *over 100 000 t/a* *production over 50t per day* *Quantity of material to be removed* *Risk analysis* *size, and location* *technological level of a project and expected environmental impact* *threshold*
Installations for the manufacture of particle or fibre board	Ticked by **56** from 183 respondents	*100 000 t/a* *50 000 m2* *depends on fibre type* *over 20t per day* *over 50 000 m3/yr* *plant capacity* *Quantity of material to be manufactured* *risk* *threshold*
Re-gasification projects	Ticked by **52** from 183 respondents	*25 MW* *manufacturing plants for liquid gas or significant quantities (knowledge of gas systems low!!)* *not relevant for Austria* *threshold*
Particle accelerators (of 50 MeV [mega-electron volts] and over)	Ticked by **52** from 183 respondents	*not relevant for Austria*
Transhipment depots	Ticked by **47** from 183 respondents	*dependant on materials handled and volumes handled* *determined on what licensed to handle* *Dimension* *goods, chemicals in transit* *Quantity of material to be transported* *size of the concerned area* *threshold* *traffic generation*

Figure 45 Summary of suggested criteria/thresholds, sorted by respond rate

Question no. 15 also provided the opportunity to suggest other project types that should be made subject to EIA. The proposed categories such as further comments are listed in Figure 46.

Further additional project types suggested
Airports
Extremely high buildings
Artificial turfgrass fields
Gas compressor stations
Major wind farms
Production of plastics or plastic products
Further general suggestions
Project types should not have to be specified in a list. EIA should be made for all kinds of projects that might significantly impact the environment. Authorities should decide which ones. The devoloper is fully responsible and has got to have the necessary environmental knowledge to inform the authorities.
Cumulative regional Impact Assessment prior to new approvals
Small facilities covered by the directive on control of risks

Figure 46 Summary of further additional project categories

Interpretation of key results

The responses to the Questionnaire reflect that generally all proposed additional project categories seem to be relevant in the view of the respondents in terms of expanding the Directive's Annexes, as each category has been ticked – from golf courses as the most often chosen category to transhipment depots as the least ticked. From evaluating the results, a tendency can be shown towards project types which are proposed to be listed in Annex I and should be made subject to an assessment in accordance with Articles 5 to 10, which are:

- Installations working with Genetically Modified Organisms (GMOs) or pathogenic micro-organisms such as laboratories, test facilities, trial areas;
- Military practice grounds;
- redevelopment of contaminated land; and
- golf courses.

Approximately the same amount of responses indicated that the following four project types should be subject to a specified criteria/threshold:

- business parks;
- golf courses;
- meat processing plants; and
- masts for mobile phones and radio or telecommunication stations.

The suggested thresholds and further comments – as shown in Figure 45 – are to a large extent too shallow to allow for appropriate interpretation and analysis. Further research would be needed to provide for a practical basis to set specified criteria/thresholds for the suggested categories.

3.2.3 Question no 16: Merging the two Annexes of the EIA-Directive

Wording of the question

In the EU Directive the list of project categories is divided into Annex I and Annex II (categories listed in Annex I demand mandatory EIA, whereas for projects listed in Annex II, the Member States (MSs) determine whether they are likely to have significant effects on the environment). The Commission's last review of the EIA Directive[34] stated that some MSs see the possibility of a more harmonised application of the Directive across the MSs by merging the two Annexes into one single list with mandatory EIA thresholds for each project category.

Do you think this would be a recommendable approach?

☐ Yes ☐ No ☐ I don't know

Please explain your judgement:

Underlying Intention of the Question

Question No. 16 has a twofold objective: it aims both at re-evaluating the MSs position regarding the issue of merging the two Annexes as well as acquiring new information concerning the advantages and disadvantages of such a modification. In fact, detailed and comparative information concerning technical constraints and obstacles, on the one hand, and overall advantages of merging the two Annexes, on the other, are needed if new recommendations are to be made on this respect.[35]

Summary of results

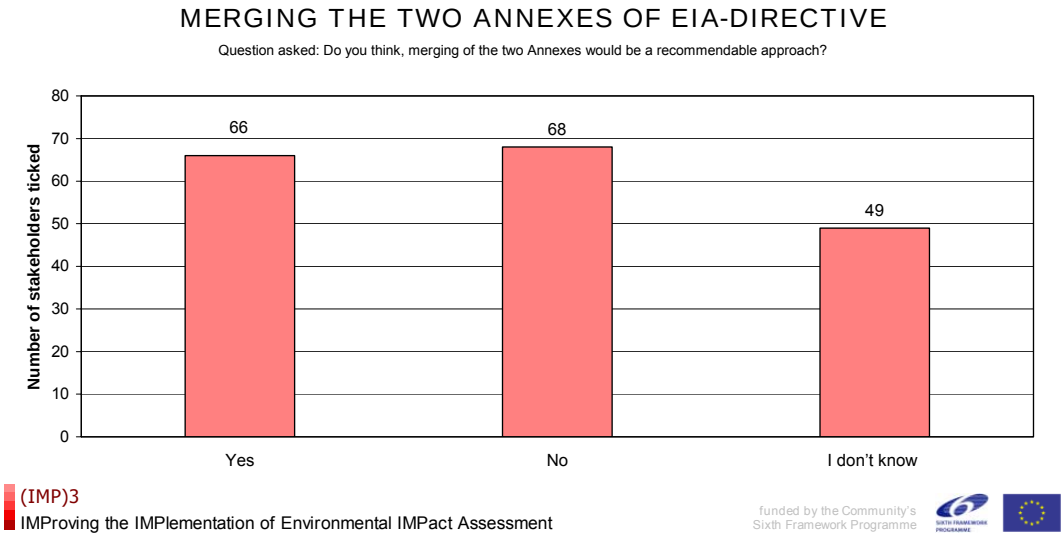

Figure 47 Totals obtained for Question No.16

[34] REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the Application and Effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC): How successful are the Member States in implementing the EIA Directive.

[35] Note: One should recognize that the merging of the two Annexes is not the only way to guarantee an adequate level of harmonization. In principle, a tighter approach to the formulation of the Annex II could be another possibility to promote harmonization.

Regarding the total results opinions for and against merging the EIA Directive Annexes are quite balanced, with nearly the same number of answers ”yes” and “no”. In addition, the “I don’t know” responses were relatively high given the number of total questionnaires returned. In order to better understand what these results might stand for, responses to Question No.16 were examined according to country and type of stakeholder.

3.2.3.1 Results per type of stakeholder

Figure 48 presents the results of Question No. 16 per type of stakeholder.

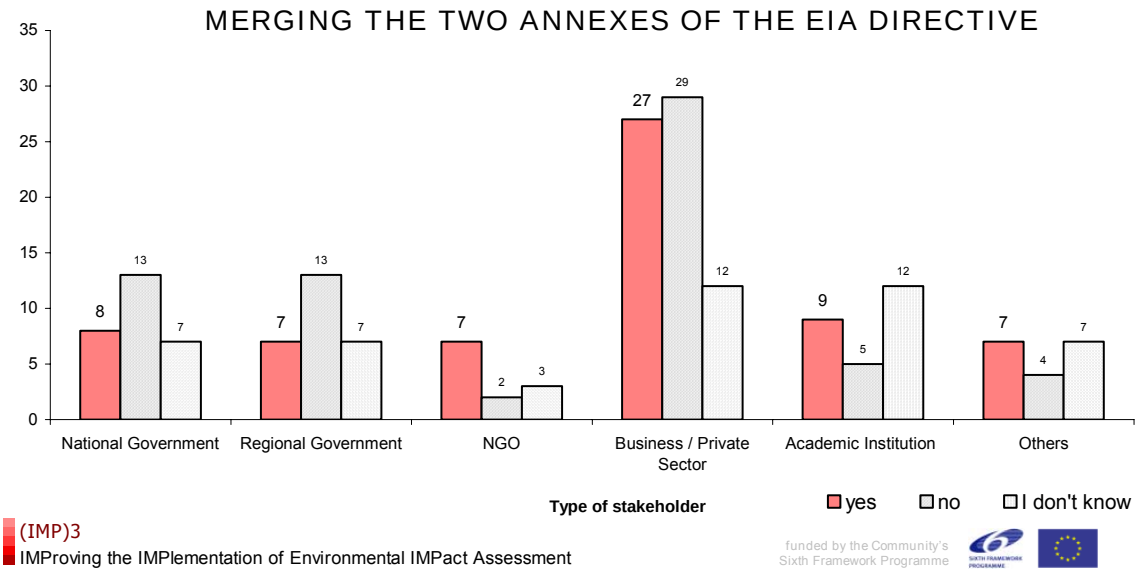

Figure 48 Question No.16 results per type of stakeholder

As it can be seen in Figure 48, the “No” has clearly higher results than the “yes” for *National Government*, *Regional Government* categories, while for *NGO* and *Academic Institution* the “yes” response is prevalent. *Business/Private Sector* presents a balanced response between “yes” and “no”. The “I don’t know” response varies accordingly, being higher than the “yes” response only for these latter categories – *NGOs* and *Academic Institutions*.

3.2.3.2 Results per country

Figure 28 presents the results of Question No. 16 per country.

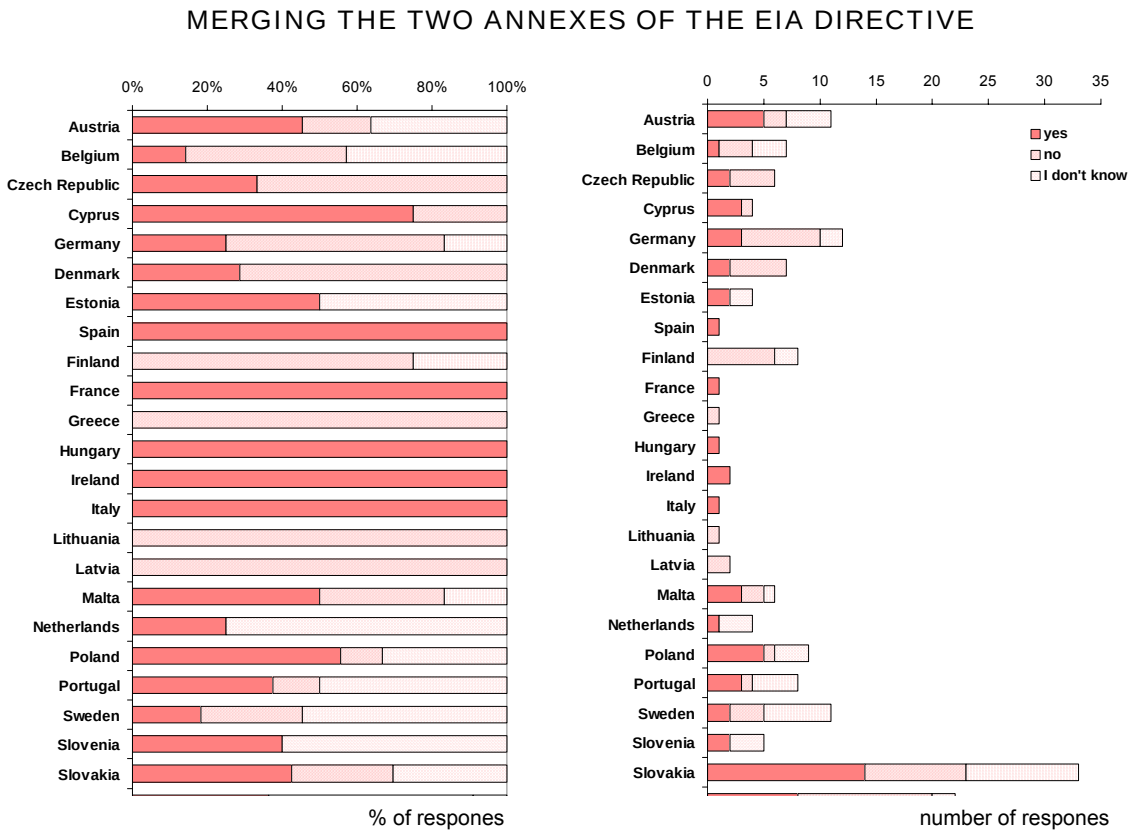

Figure 49 Question No. 16 results per country

Given the low questionnaire return for this question our attention focused on countries with, at least, 5 responses. The “yes” response has higher scores than the “no” response in Austria, Malta, Poland, Portugal and Slovakia. In Czech Republic, Germany, Denmark, Finland and the United Kingdom “no” responses have higher scores.

Interpretation of key results

Arguments in favour of merging the two Annexes

Respondents more receptive to this new proposal generally referred to the simplification of screening procedures, higher levels of environmental protection, more equitable conditions regarding (developer) market opportunities and the need to uniform regulations as the main advantage of merging the two Annexes of the EIA Directive.

The simplification of EIA (screening) procedures should result from less discretion and political influence over the screening decision, more straightforward screening rules and fewer opportunities for questioning the screening decision by the EIA authorities.

Additionally, merging the two Annexes is regarded as a guarantee that all potentially harmful project types would be subject to EIA, resulting in equal standards of environmental protection among all MSs. Making EIA mandatory for all Annex II projects would lead to a more careful

assessment of these projects' expected impacts in all countries, while smaller projects would not have to be unnecessarily subjected to EIA.

The harmonization of screening rules is not only seen as an advantage in itself but also as a key step towards the integration of EIA with other international agreements as the ESPOO Convention or the Kiev Protocol, as is also frequently referred to other community control regimes as the IPPC and the Seveso II regulations.

Arguments against merging the two Annexes

The differences between Annex I and Annex II projects, different (environmental) licensing administrative and legal frameworks, as well as the need for taking into account regional specificities are the most important arguments presented by those respondents against the proposed modification to the EIA screening system.

The separation between Annex I and Annex II projects is regarded as important for the distinction of clearly different degrees of impacts and has been used to stress the need for different EIA procedures. Merging the two Annexes would reduce all mandatory cases to the same circumstances which, ultimately, can hardly be a simplification of EIA procedures, as pointed out by some of the respondents.

On the other hand, such drastic changes to the screening rules would have a disruptive effect on the EU MS EIA systems, given the great diversity of planning and licensing procedures among different countries, if ever possible.

However, the need for the consideration of regional specificities is the most presented argument. The merging of Annexes I and II of the EIA Directive into a single mandatory list with thresholds is classified by one of the respondents as a *mechanical* approach, as there will always be cases where the use of thresholds cannot account for all the relevant information concerning a certain project development. Besides, more important than recognizing project types should be identifying types of impacts and that is not possible without a certain degree of discretion left to the EIA authorities. Case-by-case analysis will always be a valuable and much useful screening tool.

According to this position (against merging Annexes I and II), harmonization of EIA procedures is equally desirable. However, it should be pursued through the more accurate interpretation of the EIA Directive's screening criteria, rather than by setting uniform regulations.

And so, in face of these arguments, it comes to no surprise that the "no" response has higher scores for those countries with more mature EIA systems, as is the case of Belgium or Sweden, or with strongly decentralized (Denmark, United Kingdom) or sectoral (Germany) planning systems. Accordingly, such fundamental modifications as merging the two Annexes of the EIA Directive seem easier to accept by those countries with more recent EIA regulations, as may be confirmed by the higher scores for the "yes" response in the Czech Republic, Hungary, Malta and Slovakia (see Figure 49).

As an overall evaluation of the two conflicting positions regarding the proposal of merging the two Annexes of EIA Directive into a single list, arguments presented for the "no" response tend to be more realistic and concrete, despite the relevancy and important contribution of the arguments presented by those who agree this could be an adequate approach for the further harmonization of screening rules among EU countries. And so, not only has the "no" answer have slightly higher scores, its corresponding arguments seem stronger and more consistent.

In fact, some of the opinions favourable to the merging of the Annexes may not reflect the difficulty of implementing new amendments as well as the important role played by public discussion in the EIA process, which can also explain the prevalence of the "no" response for the *National Authority* and *Regional Authority* categories. These stakeholders are more likely to be aware of the role played by contextual factors in the screening decision as well as of the obstacles and risks pertaining to the implementation of such a modification in their national screening systems.

In the case of the higher scores obtained for the "yes" response in the case of *NGO* and *Academic Institution* categories, these should be interpreted in the sense of higher environmental protection, in this case relating to stricter screening rules.

Figure 50 presents a summary of the main ideas supporting "yes" and "no" responses.

Do you think merging the two Annexes into one single list with mandatory EIA thresholds for each project category would be a recommendable approach?
Yes, because...
It would minimize political influence. However, thresholds and specified (listed) criteria are not always sufficient for the assessment of some types of impacts
Discretionary screening decisions by MS has led to the evasion from EIA of potential harmful project activities
Assigning the need for EIA for all Annex II projects above certain specified thresholds is a means of guaranteeing that none is left behind due to misinterpretations of the EIA Directive's screening criteria
It would make screening more objective (cuts out wrangling as to whether a project has significant impacts)
EIA is the only means available for the protection of environment and human health and so it would be useful to apply it to all major project developments
It would be a simplification of the screening procedure
It would stimulate public participation in this matters once even less environmentally harmful project types may improve considerably due to public discussion contributions in EIA .
It would be a more straightforward screening procedure and would provide fair economic competition for the developer throughout Europe
There are not really different EIAs procedures for Annex I and Annex II projects
Making EIA mandatory for all Annex II projects would lead to a more careful assessment of these projects' expected impacts
It would lead to the simplification of EIA legislation
It would be easier for the competent authorities to decide in each case, once they usually lack the necessary technical information for taking the right decision (and so leaving them more receptive to political or public pressure). However, it would be too high a risk to set thresholds for this type of situations given contextual factors' great diversity.
Screening rules should be uniformly set for all MS
There is the need for predictable procedures
Makes the EIA process more equal and balanced between MS
Some projects having low impacts on the environment would not be subjected to mandatory EIA.
The answer is "yes" only if there is the possibility for case-by-case analysis but "no" if this is to be a definite list!
EIA procedure would be simpler and take less time and effort.
The wide discrepancy between the number of EIAs carried out in the different MS should not exist. A deeper harmonization could also reduce the (presently existing in Malta) preferential treatment for certain developers.
This could be a more protective for the environment and public health measure.
To a certain extent. However, elements of discretion should remain for developments below the threshold values set in the one-list screening Annex.
This would be a more harmonized and helpful approach for the integration of ESPOO Convention and Kiev protocol into EIA regulations.
It would ensure consistency in the screening approach towards the promotion of an European wide basis screening tools
Makes more sense having the same threshold values applied across the whole Europe
Would lead to a higher level of legal certainty
Would improve consistency of the environmental assessment and disencorage debate on this subject
…but this is only one approach. There should be also concern about relative ecological sensitivities regardless of the type of project development.
Makes easier the application of the law

Do you think merging the two Annexes into one single list with mandatory EIA thresholds for each project category would be a recommendable approach?
No, because…
Annex I and Annex II projects are different in terms of seriousness of impact and type of EIA procedure to be performed
It is preferable to have case-by-case analysis and because (screening) rules will be the same for all Member States
It would mean facing both types of projects – Annex I and Annex II's – in the same way.
Different geographical, climatic and environmental local conditions.
Case-by-case decisions for Annex II projects are often appropriate, best fitting and not too complex.
Contextual factors can be quite different among different countries/regions and so it should be left for the MS the possibility to decide upon whether or not an Annex II project should be subjected to EIA. Besides, pointless EIA processes tend to weaken this important tool because in most of the times EIA procedures are administratively heavy and time consuming.
Harmonization of screening rules is a good idea but might as well fail given national/local circumstances
New modifications to the Annexes system would give rise to new resistances
Making amendments to the Directive might seem straightforward in Brussels but causes uncertainty, additional work and usually confusion in practice. Making amendments to domestic legislation takes an enormous amount of work. Unless the directive is causing major environmental problems it should not be amended.
Merging the two Annexes of the EIA Directive could introduce other loopholes to the Directive's screening system as well as stimulate new attempts to avoid EIA through salami slicing of projects
It would lead to the increase of EIAs, which could disencourage people's participation in these processes
Despite the need for EIA, different project types must be assessed by different EIA procedures. Besides, it would be good to have all projects listed in one sole list if it does not disencourage the environmental assessment of smaller or not listed project types.
It is hard enough applying present screening rules…
Special local conditions should always be considered.
It will be impossible to set acceptable and adequate threshold values for all types of projects because of lobbying from the industry will be too strong. In many cases, this would just worsen the situation in terms of environmental protection
Loosing flexibility in the screening decision at European level may also be equivalent to leaving out of EIA procedures some project types that are presently mandatorily environmentally assessed.
The screening system works well as it is.
Merging Annexes and setting threshold values for former Annex II's projects may lead to some confusion specially if the MS already have those projects screened through the use of thresholds of criteria.
A lot of projects are critical just for certain circumstances. Thus, there should be space for national implementation of the EIA Directive.
Legal and administrative differences among Member States
Having only one mandatory list would lead to disharmony instead of further harmonization.
A projects' impact depends greatly on site and human factors. In this sense case-by-case analysis are preferable.
Proponents often withhold data or set projects' dimensions and technical characteristics close to threshold limits.
If SEA and general environmental legislation are well applied, they should be enough
This would correspond to a mechanical approach in the screening phase, some interpretation will always be required and the dialogue between relevant authorities is very important.
Some project types simply cannot be fully assessed through the use of thresholds. In such approach there would be no space for site characteristics considerations for the screening decision.
Annex I and Annex II categories of projects have passed the test of time
Harmonization in EIA procedures will be attained not by making more transparent laws but by interpreting them in the same way. For this reason inspectors from different MS should work together in order to share experiences and information.
Thresholds setting is often arbitrary and difficult to apply to all situations. These could lead to the reduction of threshold values as a precautionary measure which, ultimately, can result in applying EIA when it is not really necessary.
Conditions vary a lot from project to project (even for the same type of project) and so, different types of screening approaches are advantageous.

Do you think merging the two Annexes into one single list with mandatory EIA thresholds for each project category would be a recommendable approach?
No, because...
Thresholds are already in place for Annex II's projects, so such a change would be meaningless
Too restrictive
The great diversity of social and ecological local contexts makes the distinctions based on the size of the project and the magnitude of the environmental impact more important than distinctions in terms of project types
Screening procedures for smaller impacts are needed for the case of more sensitive or vulnerable sites

Figure 50 Summary of main ideas given to explain answer to Question No.16

Brief abstract of key findings

The harmonization of screening procedures is regarded as a positive measure by the great majority of respondents, but seen as achievable by other means than the proposed modification in the case of those respondents against merging the two Annexes.

In the case of respondents favourable to this approach, in their opinion the merging of the two Annexes would lead to a deeper harmonization of the screening practice among MSs which they feel as essential for the achievement of minimum equal standards of environmental protection. Besides, some argue that applying the same screening procedures would also contribute to less divergent interpretations of the EIA Directive throughout European Union and so, to more objective screening decisions.

As for the respondents opposing to this approach, setting screening criteria on the basis of expected impacts should be more effective than listing projects by type, as far as the harmonization of the EIA procedures is concerned. Moreover, it has been stated that the proposal of merging the two Annexes lacks the necessary flexibility for the consideration of contextual factors.

On the other hand, merging the two Annexes is seen by some of these respondents as difficult to achieve or even quite disruptive of EIA legal systems given the great diversity of licensing and planning administrative procedures among MSs.

3.3 Results Interviews

3.3.1 Issue: 'Project categories'

(With respect to the project categories covered by your national/regional EIA regulations:
Are there any categories of important projects that are missing which should be subject to an EIA?
if yes, please state the reason.
Should other categories be dropped from your national/regional list/s?
if yes, please state the reason.)

Verbal-descriptive summary and interpretation of key results

Figure 51 presents a summary of the main issues raised regarding the questions quoted above.

Main Ideas	Mentioned by Stakeholders from
No additional project types	
No change in the list of categories is suggested	Austria, Czech republic, Slovak republic
No additional project categories were mentioned because France is already very comprehensive (high number of EIAs in France 1000s of impact studies). Furthermore a problem remains with the diversity – there are low instructions and few information about quality of the ecosystem and it is a very complex matter. People avoid to discuss it in a broad sense and try to focus on the presence or absence of specific types of animals and plants, but this is not the ecosystem because relationships are not taken into account. *So far the EIA studies do not deal intensively enough with long-term effects and indirect effects – whereby Mr. Biagi is very well aware that it is a difficult topic because not so much knowledge is existing.* *In France every EIA is not only made on the category but also products used e.g. waste water treatment (used a lot of wooden plate – they had many plates like that – risk of fire – authorisation was needed for storing so many plates and an EIA was necessary for that). That's why many project applicants reduce storage just to the minimum below threshold, whereby these thresholds are low in France.*	France
No, only one exception. France is dealing with much more than it is asked through the EU directive and in addition has very low thresholds. 5000 – 7000 EIAs are done in France every year. Maybe the only part missing so far is intensive agriculture – here he is not sure if it is covered enough : we have the regulation in the EIA regulations but no related development consent	France
Pursuant to the legislation in Latvia, the EIA process is divided into two types: *1. Mandatory assessment for activities in Annex I of the Law* *Case by case assessment for activities listed in Annex II of the Law. In addition, the Law enables to use the EIA process for any activity not listed in Annexes I and II, but if, for example because of its placement there is an assumption that the activity will negatively affect the environment. For this reason, we can state that there is no need to include other activities in the list that should be subject to EIA.*	Latvia
Amendments of legal regulations in the field of EIA was done also on the basis of practical experiences with the work of EIA process in Poland. The aim was to cover necessary activities and to set related thresholds to them as well. We think, the list of activities is adequate today and it is not necessary to add some activities, or to change it in some way. No.	Poland

Main Ideas	Mentioned by Stakeholders from
According to the Czech legislation, the EIA procedure is divided by enclosure No.1 of law into: – *Compulsory assessment – including the projects of category I.* – *Finding procedure – including the projects of category II.* *Law has implemented the EU directive concerning EIA procedure, but the project range is much wider and in many cases threshold values for the Czech Republic are stated more strictly, as it is stated in the EIA directive. This is a reason why it is not necessary to add any other projects in the Czech Republic.*	Czech republic
Don't think there is a need to add further projects types. However, some planning authorities have raised issues about whether recycling facilities, coastal defences, the in-filling of pits (historic pits from which gravel was taken out in the distant past) need an EIA to be done. However some other authorities, perhaps because they were concerned, were requiring EIAs for these kinds of projects so that they were using the flexibility of the Directive to ask for them. Some authorities are asking for changes in wording while others do not seem to have a problem with interpreting the current wording. Can be argued that recycling facilities are a type of waste disposal facility but could be challenged on it.	UK
Proposed categories of important projects	
Fibreboard industry	Austria, Portugal
Projects concerning international sport events as Olympic Games, European or World Championships should not be excluded from the national list.	Austria
Genetic technology	Austria
Electronic industry	Austria
Shooting grounds	Austria, Slovak Republic, Portugal
Installations, in which genetically modified organisms are disposed	Czech republic, Portugal
Military installations, Military practice grounds	Czech republic, Portugal
Removal and storage of asbestos	Czech republic Portugal
Biotechnologies in general, in particular GMOs.	Germany, Slovak Republic, Portugal
Golf courses	Germany, Ireland, Slovak Republic, Portugal
Contaminated Land	Ireland
Disposal/recovery of waste	Ireland
Surface water abstraction from water courses	Ireland
Mine rehabilitation	Ireland, Portugal
Masts for mobile phones and radio and telecommunication stations	Ireland, Sweden, Portugal
Production of plastic products – for example the plastic windows and doors (it is a boom now using chemicals, paints).	Slovak Republic
Production of tires – rubber chemistry.	Slovak Republic
Installations for evaluation of non hazardous waste	Slovak Republic
Masts for mobile communication and game stalks	Sweden
Mine rehabilitation	Portugal
Transhipment depots	Portugal
Business parks	Portugal
Redevelopment of contaminated land (e.g. brown fields, …)	Portugal
Manufacture of lime	Portugal
Particle accelerators (of 50 MeV and over)	Portugal
Installations for flood and/or avalanche protection	Portugal

Main Ideas	Mentioned by Stakeholders from
Meat processing plants	Portugal
Wave energy plants	Portugal
Organic (biodegradable) wastes recovery	Portugal
Mussel farming (it is presently missing, once mussel is not fish)	Portugal
Large commercial units, mostly concerning car parks or parking lots	Portugal
Other ideas	
According to the case by case examination in Austria, the trend is to classify many projects as too small for EIAs. So there is an essential need for clear criteria, which projects are environmentally relevant and which are not relevant. *Especially concerning industry plants, the existing thresholds often depend less on a project-type's impact on the environment but more on the strength of the lobbying for high thresholds in order to avoid an EIA for as much projects as possible. (e.g. in the case of galvanization plants) Some industrial branches have a high interest not to be subject to EIAs and are quite successful not being on the list of EIA-relevant projects. So e.g. in Austria, the thresholds for industry plants are less strict than for waste management.*	Austria
Urban development projects are not sufficiently regulated. E.g. for area ‚Hafencity' a development plan had been drawn up before EIA obligations came into force. Now each building there only needs a normal building permit. But all of them should actually undergo an EIA. *What does not really appear, but might also be quite specific to Hamburg, are all kinds of landfills, changing surfaces of water to land.* *Some kind of area for 'other projects' is missing, where experts could decide case-by-case whether the planned projects have likely negative impacts on the environment depending on local circumstances. On the other hand, experiences show that a case-by-case examination in Hamburg in all cases did not result in an EIA obligation. (Since 2002, 43 case-by-case examinations have been carried out, all with the result: no EIA). Screening criteria are too weak, area of discretion for authority is too wide. Cumulation is not handled in practice. Also project criteria (e.g. size of project) is too global. That is how salami slicing is possible – also a lack of transparency for the public and in decision making in general. Implementing the Public Participation Directive 2003/35/EC will hopefully provide for more transparency and improve quality of decisions*	Germany
Generally speaking, I think that now SEA ["Plan-UVP"] is able to compensate for gaps in the project list of EIA. I am very satisfied with the German implementation of the SEA Directive. The SEA project list also includes plan categories that cover project types which are underrepresented in the EIA act, e. g. agricultural and forest management project/plan types (remark of the interviewer: agricultural project types covered by the mandatory EIA project list are intense livestock breeding installations, natural irrigation and drainage projects; forest management project types are deforestations and initial afforestations; in each case depending on defined thresholds).	Germany
No, EIA law has just been amended – list of projects is fine, problem rather with thresholds for case-by-case examination. Sees maybe difficulties that now some project types only have to undergo an EIA after case-by-case examination and that the authorities may rather decide for no EIA. Will be rather used as a vehicle to circumvent the obligation to undertake an EIA	Germany
France has a lot of EIA (5000 to 6000/year) so it has good and bad aspects to it. On the good aspects, a lot of projects are submitted to impact assessment but on the other hand, there is not much control for projects others than industrial projects. Industrial projects are submitted to thresholds controls during the project but not the other projects and to my opinion the problem is the sum of small projects in an area (i.e. pig farms where the only criteria to do an EIE lies on number of animals per farms so that small projects are not submitted to an EIE). One should also have a look at if the mobile antennas are put in the text.	France
The EU directive for EIA process was implemented by a law. However, the extent of projects in the conditions of the Slovak Republic is wider – e.g. cement mills, meat processing industry. In general, each project that affects environment should be assessed and adequate thresholds should be set.	Slovak Republic

Main Ideas	Mentioned by Stakeholders from
Many of the listed projects in the interview guide would require an EIA. Project types are listed in an Annex to the Swedish EIA ordinance, alternatively in other Annexes e g re. ecologically harmful installations which must be scrutinized according to the Environmental Code. Sweden has low thresholds in general. It is being discussed that too many EIAs (e g for smaller installations) are being carried out and that there is a need for simplification.	Sweden
Planning aspects should be better taken into account. EIAs are not sufficiently emphasized in e g The Planning and Building Act. We believe that more projects in general should be the subject of an EIA. Furthermore, strategic environmental impact assessment are crucial for a foresighted planning.	Sweden
No definite problem areas. Some of these issues have consent regimes that look after these things adequately e.g. removal and disposal of asbestos. So need to be careful not to apply EIA to areas that already have procedures in place. Things like golf courses are missing in the Directive but are picked up in our own UK planning regulations. Some of these gaps are filled. Shooting ranges, typically, the main issue we are looking at is a noise one, it would have a noise assessment carried out on it as part of the planning regime. I think there's a risk of using EIA to address a single issue and I'm not sure that's what EIA should be about. Maybe we should be just looking to, thinking of the UK context, the planning system is adequate to deal with that. Directive exempts civil defence projects but our Ministry of Defence has a policy of doing EIAs on those sorts of things because it appreciates that they would probably be required in other circumstances. Masts for mobile phones again it might be another one issue thing of the landscape and visual effect of it or you get into the completely unknown issue of what are the health effects, to which there is no answer at the moment, so you're not much further forward. As the Directive is at the moment its not far off the mark though you do come across cases where you do get anomalies but I can't point to one saying here's a big gap. I guess people would resist some sort of catch-all element within the Directive that gave people the power to capture projects that aren't absolutely defined in the Directive. In some areas however, the Directive is almost too specific if it was a bit more general it would capture it e.g. pipelines.	UK
It is not a question of including new projects but of changing the screening method. I'm for a method similar to Canada's, where screening is made on the basis of previously defined and regulated criteria [and not necessarily through specified and fixed thresholds for certain kinds of projects]. All major projects must undoubtly be subject to mandatory EIA while, for smaller ones, environmental assessment should be considered in the context of spatial planning or within SEA procedures.	Portugal

Figure 51 Summary of main ideas given to the questions regarding 'project categories'

Most respondents stated that no changes in their national/regional list of project categories subject to EIA are required, with one exemption: urban development projects are mainly seen to be assessed through SEA rather than EIA.

According to the feedback, problems with the national/regional list of project types rather lies in the setting of adequate thresholds than in the selection of categories. Some interviewees indicated that some thresholds are set too low. In the case where no thresholds are set, it has been stated that screening decisions more than likely turn out negatively (no EIA required). Referring to this, case-by-case examinations are regarded as a possible vehicle to circumvent EIA obligations, as some interviewees mentioned that evaluations have shown that most of the examinations decide against EIA. In addition, a need for more specified criteria for assessing the environmental relevance of projects in screening decisions has been noted.

Besides these general remarks some additional project types have been proposed which are listed in Figure 51.

Some other remarks noted that depending on the national implementation, SEA could in some way compensate for gaps in the EIA project list. E.g. in the case of Germany's approach of implementing the SEA directive, present legislation also includes plan categories that cover project types which are underrepresented in the EIA act, such as agricultural and forest management projects/plan types (remark of the interviewer: *agricultural project types covered by the mandatory EIA project list include intense livestock breeding installations, natural irrigation and drainage projects, forest management project types including deforestation and afforestation, in each case depending on defined thresholds*).

It has also been mentioned that some kind of area for 'other projects' would be useful, where experts could decide case-by-case whether the proposed projects have likely negative impacts on the environment depending on local circumstances.

3.3.2 Issue: 'Project type descriptions/criteria'

(From your expertise: Are you aware of any difficulties in interpretation of project type descriptions? If yes: For which categories do you possibly see a need for specifying certain descriptions and why? either EU directive or national legislation or both)

Verbal-descriptive summary and interpretation of key results

The quotes below shall give an idea of the key issues raised by interviewees in relation to the interpretation of project type descriptions.

Main Ideas	Mentioned by Stakeholders from
No difficulties in interpretation of project type descriptions	
Generally there is no difficulty in interpreting project type descriptions. However, the more important problem is the assessment of the accumulation of projects that is handled in a very different way in the Federal States of Austria. *Generally there are no difficulties. Whenever there are discussions, whether a project has to be subject to an EIA, there is a special procedure to clarify this question.*	Austria
No, difficulties do not arise so much because of project type descriptions or definitions of thresholds.	Germany
No, there is the institution of preliminary negotiation in the Czech Republic, where it is possible to discuss possible uncertainties among participants.	Czech Republic
However, sensible developers and sensible planning authorities can and do work through and resolve these interpretational issues	United Kingdom
As there is usually a case by case study, there are no difficulties about project types or thresholds. If for an action no EA is carried out, e.g. because the agency thinks that this action is on the list of the categorically excluded ones, any person with legal interest can sue the federal agency.	USA
Interpretational problems within certain sectors	
In general implementation of the directive at the Federal level is too global, especially regarding the sector of urban development. In Hamburg, development plans are already covering the city and some are 30-50 years old. In these cases, it only needs a normal construction permit for buildings, which would require EIA, if a development plan would need to be drawn up. *Problem with thresholds for pipelines, especially for urban areas.*	Germany

Main Ideas	Mentioned by Stakeholders from
For spatial planning as well, it is not clear whether we have to do one EIA or not.	France
There is some confusion and ambiguity around certain projects types e.g. is an urban development project just a development in an urban area or a development of an urban character that could be on a greenfield site (rural area). Another example is industrial development where in our case light industrial and office developments are included in the same planning use class and hence there is an issue about whether office development needs EIA or even whether conversions from office developments would need EIA even though they may not need planning permission. There are also instances the developer has argued that a development is one project type rather than another.	United Kingdom
I do get a few queries about where certain types of projects fit within the regulations e.g. pipelines transporting water; if the regulation just referred to pipelines it would be okay, but it talks about pipelines transporting oil and gas and the transport of water has to be between river basins. These occasions are few and far between.	
Problems with screening decisions	
The difficulties lay more in the scope of interpretation that EIA legislation provides in two respects: – *interpretation of "ecological sensitivity of project locations" in case-by-case examinations;* – *interpretation of "significance" of an impact or interference.* *In both cases, the scope of interpretation may be used by the project developer to circumvent an EIA.*	Germany
One problem is that decisions made by the County Administrative Boards on whether to consider a project to have a significant impact or not takes a long time.	Sweden
There can be some interpretations if a project is on the list of projects requiring an EIA. However, as most of these projects are discussed in public, generally an EIA would be conducted. The responsible minister has the option to require an EIA for any project that is likely to have an impact on the environment, notwithstanding if that project is on the list or not.	Canada
Dealing with cumulative effects	
In general, if there are several similar projects developed within the same area, cumulative effects arise, even if each project is too small to justify an EIA. but all together may cause severe effects on the environment. These accumulative effects are juridically not well defined.	Austria
Another problematic aspect in determining EIA obligation is if different owners (developers) are involved. For example, several windturbines in one area, each belongs to another farmer, therefore no EIA, although the sum of turbines constitutes a wind park.	Germany
Problems with national/regional transposition of the Directive	
The problem lies in the way the Directive has been transposed, not in the Directive's project descriptions. Germany only translated the descriptions 1:1 without aligning with the national terms in relevant Acts (e.g. urban development law).	Germany
Problems in accurately defining the scope of a project	
The definition of the scope of the project can be especially difficult. (E.g. when a Hydro-power station is built, but the developer wants to exclude the transmission line.) Generally, EAO tends to require a look at the effects of all parts of a project in the determination of the scope of the EIA.)	Canada
New versus changes and extensions of projects subjected to EIA	
In general, not so many specific definitions are problematic than rather the fact that in many sectors only new developments have to undergo an EIA procedure, there are normally no changes – deficit in national implementation.	Germany
Cases of activity's changes should be clearly defined – when these changes are subject to EIA process, in order to prevent possible speculations from the side of proponents.	Slovak Republik

Figure 52 Summary of feedback regarding project type descriptions

The main issues indicated by the Intervieewes can be grouped into the following categories:

- No difficulties in interpretation of project type descriptions;
- Interpretational problems within certain sectors;
- Problems with screening decisions;
- Dealing with cumulative effects;
- Problems with national/regional transposition of the Directive;
- Problems in accurately defining the scope of a project; and
- New vs. changes and extensions of projects subjected to EIA.

The responses indicating that there are generally no problems with the given project type descriptions mainly mention that interpretational problems can be easily solved through experience and knowledge from the competent authorities. Interpretational problems in EIA practice occur in some sectors, such as e.g. urban development and the spatial planning sector in general, but also in descriptions and setting proper thresholds for pipelines.

Other problems that have been stated refer to the screening decisions. In particular the definition of the term ‘ecological sensitivity’ in reference to project locations and the interpretation of the term ‘significance’ of an impact or interference would need further explanations and clarification.

Also, cumulative effects seem to be problematic aspects within screening decisions as they often lack well defined juridical guidance.

Another aspect that has been stated refers to the fact that changes and extensions of existing installations are generally difficult to capture with regard to obligatory EIA. In this field, clearer legal advice is needed too.

The following table lists the mentioned categories, where Interviewees possibly see a need for specifying certain descriptions:

MENTIONED PROJECT CATEGORIES
Urban development
Industrial zones
Theme parks
Waste transfer stations
Water management and abstraction
Motorways/express roads and for the case of district roads with 4 lanes or more and a central divider
Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works
Installations for the disposal of non-hazardous wastes
Holiday villages and hotel complexes and associated developments when located outside urban or expansion urban areas
Cement kiln
chains of stores
Tracks for long-distance trains
Pipelines

Figure 53 Mentioned project categories for specifying certain descriptions

(Would you say the set of thresholds/criteria for all project types obligatory to EIA in your country is adequate?

If no: Is there any particular threshold/criteria in your list/s of projects which you would consider as not appropriate?

Could you tell the main reasons?)

Main Ideas	Mentioned by Stakeholders from
Set of thresholds/criteria is generally seen as adequate	
I think yes. Although a local correction can be used for the noise issue, for example.. Sometimes it is done in order to meet the investors' demands.	Czech Republic
It works (but it is always relative – big projects can have small impacts and small projects can have big impacts).	France
Yes. We may have even lower thresholds in order to meet other legislation. *In general yes, with a few exceptions.*	Sweden
Yes they are adequate, however there is confusion between mandatory/selection criteria and the indicative criteria which are our pointers to help developers think through the issues considered in an EIA. It's more a problem of how they are named than in principle.	United Kingdom
Yes. I have no evidence to the contrary, but others that are dealing with planning applications on a daily basis might take a different view.	
Yes, because the list of actions is frequently adapted to the actual needs.	USA
Interpretational problems within certain sectors	
At the moment in Austria, each treatment of hazardous waste has to be subject to an EIA, even if it is very small and has almost no impact on the environment. A threshold would help to avoid EIAs for such minor projects with almost negligible effects on the environment.	Austria
The threshold for golf courses with 10 ha is too low, because almost every golf course is larger and it's questionable , if each golf course should be subject to an EIA.	
The threshold for commercial areas with 50 ha too high.	
Each burning of waste oil is subject to an EIA. A threshold is required in order to avoid that even very small projects have to be assessed by an EIA.	
For poles for mobile phones, the basic questions of risks needs to be clarified before EIA can be made mandatory.	
e.g. holiday villages, hotels (threshold is number of beds) – if one has a closer look, these are in fact huge establishments – here thresholds should be lowered	Germany
Tram lines now only have to undergo an EIA after case-by-case examination	
Livestock installations – step backwards with new amendment; problem in general, EIA should be obligatory at lower thresholds.	
Most urban and/or tourism development projects are not subject to an environmental impact assessment for having been already approved along with the regional physical land use plan in which they are included. For these cases, I think the plans themselves, particularly Detailed Layout Plans , should be subject to environmental impact assessment. Besides, I cannot understand the reason for these exceptions when there are other types of projects, besides urban/tourism ones I mean, that despite the fact of being included in sectoral plans still have to be subject to an EIA procedure.	Portugal
Anyhow, I think the Annex structure should be changed towards case-by-case analysis in every or almost every case. Nevertheless, if Annex II should be kept, I would like to propose the following modifications:	

Project Category	Actual threshold		Proposal
	general case	sensitive areas	
1 g) reclamation of land from sea	≥ 100 ha	All cases	All cases
3 i) Wind farms	More than 20 wind mills	All cases	> 20 wind mills is an excessive threshold
10 e) Construction of roads, harbours and port installations, including fishing harbours	Main and complementary travel roads…	…..	All cases
10 h) Tramways, elevated and underground railways, suspended lines or similar lines of a particular type, used exclusively or mainly for passenger transport	≥ 20 ha or ≥ 5 km	≥ 4 ha or ≥ 1 km	extension to elevators and cable-cars
11 a) Permanent racing and test tracks for motorized vehicles	≥ 8 ha	All cases	All cases

Main Ideas	Mentioned by Stakeholders from
As an example: parking areas, where EIA is obligatory in case of more than 500 spaces. There is an effort from the side of proponents to reduce artificially the number of parking spaces in order to avoid EIA. Other criteria should be considered to prevent such speculations. If something is near to a threshold value reasons should be looked for why the given activity should not be assessed and not why to assess it. Connecting activities should always be assessed jointly, the synergic effect is different from the separate impact of individual activities.	Slovak republic
Closer linkage of thresholds/criteria with impacts on the environment	
In general, the thresholds should be closer linked to the impacts on the environment. So the production output in real terms would be a very good criteria for industrial plants, as very often, the emissions are directly related to it. *The area of the project is often not related to its impacts. For shopping malls e.g., the floor space for shops would be sufficient. Also the number of parking lots is a good criteria, as this number is usually related to the size of a development.*	Austria
The basic approach to the definition of criteria is often not adequate. There is too much focus on criteria like size and capacity, and too often adequate reference to the actually significant impacts of a project is missing. For example, the length of a road or its sealed surface area is rather irrelevant, compared to its habitat fragmentation effects.	Germany
I would say the thresholds are in fact even lower in practice. Again, it is important to adjust the EIA with regards to the situation.	Sweden
Quality of Screening and scoping	
Some kind of pragmatic approach is needed to make a first assessment and to contain the number of projects for which an EIA is needed. However, this again shows the importance of good quality in screening and scoping. It is here where the actually significant impacts should be identified. It also must be mentioned that Annex II of the German EIA act gives the opportunity to provide for an EIA even if thresholds are not exceeded.	Germany
Another problem is the practical application of screening procedures: normally decisions rather against compulsory EIA. It is hard to tell, if this is a bad thing in most of the cases, but it suggests in some cases, where the decision has been reached against EIA, that under formal consideration it would rather turn out for an EIA to have been obligatory. The set of level of thresholds is rather less problematic than the practical application of screening criteria. But there is no empirical study that could prove this assumption.	
It is generally anticipated that too many activities/projects are subject of screening, which is very complicated, money and time consuming process in Slovakia. It is evident that too strict criteria for screening were introduced (no thresholds set up for many activities) and CA is overloaded by rather administrative work than real EIA. Screenings become formal.	Slovak Republic
Circumventing EIA obligation through staying just under thresholds	
Projects are often so designed that they just do not meet the thresholds and consequently do not require an EIA. As these projects with a size just below the threshold that would require an EIA can also lead to negative effects on the environment, not conducting an EIA is often not acceptable.	Austria
Well-known problem with developers trying to stay just under threshold. Not really understandable why the fear of EIA is still so high because working with EIA is very effective regarding the public. Risk factors can be properly discussed and the only difference to other formal procedures is to document considerations and assess them.	Germany
National specificities	
Across Europe, different projects have different national importance, e.g. skiing resorts or water power plants have high relevance in Austria. E.g. woodlands in different countries have different sensitivity to certain impacts. In Austria a clear-cutting of 10 hectare is rather large, whereas this size is considered to be quite small in other countries.	Austria
Set of thresholds/criteria depends on political bargaining	
Thresholds are always a result of a political bargaining and it's difficult to give reasons for their choice.	Austria

Main Ideas	Mentioned by Stakeholders from
Linkage to SEA	
I think there would be no need for positive lists, with specified thresholds for each type of project, if the decision regarding a specific project was made in the context of Strategic Environmental Assessment and, so, prior to the project's environmental assessment. This would make the whole process simpler, as well as prevent cumulative impacts more efficiently, (which presently are not fully taken into consideration for most EIS), or even account for different impact magnitudes according to project location.	Portugal

Figure 54 Summary of feedback regarding national thresholds/criteria

The responses to the question whether the national set of thresholds/criteria obligatory to EIA is seen as adequate, can be grouped into the following main categories:

- Set of thresholds/criteria is generally seen as adequate;
- Interpretational problems within certain sectors;
- Demand for closer linkage of thresholds/criteria with impacts on the environment;
- Quality of screening and scoping;
- Circumventing EIA obligation through staying just under thresholds;
- National specificities;
- Set of thresholds/criteria depends on political bargaining; and
- Linkage to SEA.

The stakeholders who generally estimate the set of thresholds/criteria as adequate were expressing their opinion with some reservation, mentioning some exceptions or feeling that they were not the right person to ask.

Other responses refered to interpretational problems within certain sectors. Interviewees mentioned e.g. the threshold were set too low for golf courses and too high for commercial areas and holiday villages. Having no thresholds set can lead to the necessity of undertaking EIA for even very small facilities with insignificant impacts.

One remark demanded a case-by-case analysis in *every or almost every case.*

Another problem which needs to be looked at is the well-known tendency to circumvent EIA through staying just below the threshold value. Other criteria should be additionally applied to prevent such speculations.

Further criticism expressed concerns with the basic approach of setting thresholds/criteria as focusing only on criteria such as size and capacity rather than referring to the actual significant impacts on the environment.

Again the need for robust screening criteria was pointed out by some interviewees. Here the practical application needs to be strengthened and made more efficient. There may also be a lack of transparency in screening decisions regarding the reasons for the decision. Without any empirical study to approve this assumption, it is presumed that a high percentage of screening decisions that have been reached against EIA should have rather turned out to have had to

undergo an EIA. The reasons may vary largely, but there would certainly be a need for increasing transparency in decision-making to improve the present situation.

Relating to an adequate set of thresholds and criteria national specificities play a certain role, as different projects have different national importance. But not only national/regional specificities influence the setting of threshold values; national political and commercial 'powerholders' contribute significantly to national/regional regulations too.

Especially with regard to dealing with cumulative effects, SEA is expected to be a helpful tool to unburden EIA processes.

Brief abstract of key findings

Recapitulating the main expressed views regarding difficulties in interpretation of project type descriptions such as the set of thresholds/criteria, the following key issues have been raised:

- Some interpretational problems within certain sectors (mentioned categories, see Figure 53);
- Ambiguous screening procedures, found in a number of cases (lack of transparency in screening decisions, lack of qualitative screening criteria);
- Need to closer link standard values to the actual impact on the environment rather than focusing on values responding to the project details;
- Problems in dealing with cumulative effects;
- Developer's tendency towards staying just below the threshold value for EIA obligation;
- Role of national/regional specificities not only regarding the geographic circumstances and the state of the environment, but also the political and commercial influence in implementing regulations; and
- Introducing SEA is expected to become a helpful tool to tackle some of the above mentioned issues.

3.3.3 Issue: 'Annexes system'

In the EU Directive the list of project categories is divided into Annex I and Annex II (categories listed in Annex I demand mandatory EIA, whereas for projects listed in Annex II, the Member States (MSs) determine whether they are likely to have significant effects on the environment). The approaches for transposing the Directive's Annexes into national systems vary largely.

Given the disparities, both in terms of interpretation of project types descriptions and the set of thresholds for the same project types in different Member States:

Should the Commission consider to modify the Annexes system of the Directive in order to provide for a more harmonised application of the Directive across the MSs?

If yes:
Please think of pros and cons for the following approaches:

- *suppression of thresholds (general screening process for all categories of projects without any thresholds)*
- *merging Annexes I+II to a single Annex with thresholds)*
- *duplication of categories in Annex I+II with different thresholds)*

Can you think of any other recommendable approach for a more harmonised coverage of projects with likely significant environmental effects across the EU while leaving enough flexibility for appropriate implementation to suit national circumstances, such as the geographical and socio-economic conditions?

Verbal-descriptive summary and interpretation of key results

It was chosen to separately consider each component of the questions asked with regard to the issue "Annexes system".

Figure 55 presents the summary of key results regarding the Question *"Should the Commission consider to modify the Annexes system of the Directive in order to provide for a more harmonised application of the Directive across the MSs"*.

Main Ideas	Interviewee
Deeper harmonization not desirable or not possible	
No harmonization is desirable because every country has its especial features and so it would cause more confusion than clarification	Czech Republic – consultant France – national government Portugal – consultant – academic institution – national government UK – national government
Two screening procedures should remain – screening and mandatory lists	Czech Republic – NGO
The two Annexes system works well because it profits from the advantages of both screening approaches and thus provides flexibility	Austria – National government Czech Republic – NGO Portugal – national government Sweden – Other UK – consultant
Not a favourite of thresholds – case-by-case approach by competent authority	Germany – regional body
No because it works well as it is	Sweden – regional body Poland – national Government Portugal – national government
The separation between Annex I and Annex II projects is a way of distinguishing different kinds of impacts in terms of magnitude and significance	UK – national government
For a further harmonization of EIA screening procedures	
Yes because screening criteria should be better defined in order to avoid too much discretional judgement by the competent authority	Germany – other Sweden – national government
Harmonization should be applied to the cases of projects for which there is enough scientific and technical development to provide more objectivity	Czech Republic – NGO – regional body
The definition of sentivive areas should be harmonized	Austria – Regional Body
The problem of cumulative effects is still unsolved	Austria – Regional Body
Licensing procedures should be harmonized	Portugal – NGO Slovak Republic – NGO

Main Ideas	Interviewee
Other ideas	
The number of Annexes is not relevant	Czech Republic – regional body Latvia – national government
Legislative measures are not the most adequate for the harmonization of EIA practice among countries	Germany – consultant Portugal – NGO

Figure 55 Summary of the main ideas regarding the Question' results

Being almost an open question, once nothing was initially said as to how the modification of the Annexes system should be made, it aimed at evaluating the interviewees' general opinions concerning the need for a further harmonization of (screening) EIA procedures among Member States.

As it can be seen in the above table, the majority of the interviewees think the present Annexes system should be kept, either because it works well as it is, or because a simplification of screening procedures is not possible due to regional/national specificities. Others feel that there is still a need for further amendments regarding screening criteria or the simplification of licensing procedures.

In the former case, interviewees argue that the present two Annexes system works well because of the relative advantages of the use of mandatory lists with thresholds, on the one hand, and the possibility for case-by-case analysis by the EIA authorities, on the other. Environmental impact assessment is set as mandatory for the licensing of major hazardous project types (Annex I) or projects likely to have serious environmental impacts above certain threshold values or specified criteria (Annex II), while the possibility for case-by-case assessments remains whenever the EIA authority believes that a certain project may have a serious impact on the environment given the project's specific characteristics or higher environmental site sensitivity.

Furthermore, some interviewees argue that there is no need for harmonization of the Annexes system. The great diversity of EIA screening procedures is seen as the result of different contextual situations in terms of historical background of EIA regulations and public participation practice, and and so, not a problem in itself. Besides, even acknowledging the need for improvements regarding EIA practice, the (drastic) modification of the Annexes system could lead to more confusion rather than clarification and to the wearing out of people's dedication and contribution to these issues.

The need for clarification concerning the definition of screening criteria, as a means to reduce discretional judgement by the local EIA authorities is one of the arguments supporting the modification of the Annexes system. Mainly because there are certain project types for which the technological and scientific state of the art allows the definition of uniform threshold values above which project developments are expected to have significant environmental impacts. The definition of sensitive areas and the problem of cumulative impacts are also referred to as needing further clarification by the EIA Directive.

The need for the simplification of industrial licensing procedures is another argument supporting a further harmonization of the EIA Directive's Annexes system.

Two of the interviewees (Germany – consultant; Portugal – NGO) doubted that the problems pertaining to the application of the EIA Directive among MSs may be solved or at least dealt with through legislative measures. They suggest other measures, such a strengthening the scoping

phase or having different types of EIA procedures – full or detailed EIA versus a simplified procedure – as more effective for the simplification of administrative proceedings and consequently for a more thorough analysis of the really important and relevant issues.

Figure 57 presents a summary of the responses given to the follow-up question, where interviewees were asked to give their opinion regarding the advantages/disadvantages of three possible types of modifications to the present Annexes system, namely:

a. suppression of thresholds
b. merging Annexes I+II to a single Annex with thresholds and
c. duplication of categories in Annex I+II with different thresholds

Only 11 out of 53 interviewees answered to this question.

To: Suppression of thresholds

This was regarded quite prejudicial by some of the interviewees who answered to this follow-up question. As the main disadvantages of this approach, they mentioned the high risk of evasion from the EIA procedure and the overload of administrative proceedings owing to the undertaking of case-by-case analysis for every new project independently of its dimension.

Nevertheless, there were also positive opinions regarding the suppression of thresholds approach.

The Portuguese consultant devised it as a positive measure if projects lists were kept according to a traffic-light format; the Polish National Government representative saw in it a good possibility for the consideration of national specificities, while the Slovak Republic NGO's stressed the fact that there would be no projects exempt from EIA, although recognizing it would result in the overload of administrative capacities.

To: Merging Annexes I and II

Merging Annexes I and II was positively regarded by one of the German stakeholders as well as by the Austrian's regional body representative, who referred to the need to keep case-by-case assessments as an important complementary (to thresholds) tool for the evaluation of environmental impacts.

While the Czech consultant and the Polish and Latvian National Government representatives regarded of little relevance having one or two Annexes, the Slovak Republic NGO's saw in it a simplification, albeit considering that setting up threshold values could be of some difficulty. As for the British consultant, a single list would lead to a more discretionary judgement in the screening procedure.

To: Duplication of categories in Annexes I + II with different thresholds

As for the duplication of categories's approach, the Portuguese regional body and Slovak Republic National Government representatives pointed out the advantages of a more flexible and fair solution for the consideration of regional specificities as well as a simpler approach for the definition of those projects for which thresholds would be set and those supposed to be assessed through a case-by-case analysis.

On the other hand, the Slovak Republic NGO representative regarded it as a "useless repetition of activities", while one interviewee from Germany drew the attention to the fact that, similarly to what happens in the case of the present german EIA law, it would be quite difficult to distinguish general case-by-case assessments from those regarded in the context of site-sensitivity.

Figure 58 presents the main suggestions given in response to the Question: "*Can you think of any other recommendable approach for a more harmonised coverage of projects with likely significant environmental effects across the EU while leaving enough flexibility for appropriate implementation to suit national circumstances, such as the geographical and socio-economic conditions?"*.

Apart from adverse opinions to new amendments to the EIA Directive – arising either from the feeling that the present system works well and should suit the main purpose of environmental impact assessment if well applied or from regarding harmonization as not that an important objective, quite a lot of suggestions were made. These concerned mainly changes to the screening methods and to the EIA procedure as well as suggestions pertaining to general good practice.

Interviewees' opinions about the contribution to a more harmonized coverage of projects of having new modifications to the screening procedure varied between contrasting positions, reflecting their opinion on the relative importance of *flexibility* versus *simplification*

In fact, while some interviewees feel that avoiding case-by-case analysis and applying the same threshold values may lead to seriously inaccurate impact assessments, others see uniform threshold values for all mandatory projects as a guarantee for the achievement of the same level of environmental protection among all Member States. This mainly because high levels of discretion in the choice of screening tools and criteria by each MS is seen as a likely cause for different interpretations of the Directive Annexes' content.

In-between there were several intermediate solutions suggested, such as keeping both Annexes, while adding new project types to Annex I, as may be the case of having more IPPC activities or resetting certain threshold values and screening criteria taking into account other control regimes such as the Habitats Directive regulations.

As for **changes to the EIA procedure** interviewees referred to a mandatory scoping phase, the consideration of certain broader issues at strategic level and the integration of EIA into other licensing and physical land-use planning procedures.

In some interviewees' opinion, the integration of EIA into other licensing and physical land-use planning procedures would lead to a more integrated environmental assessment of projects and activities and thus to the improvement of EIA outcome as a whole.

In the case of Austria's regional body representative, SEA is seen as an adequate tool for dealing with social issues, accounting maybe for the opinion that ruling social issues out from EIA could lead to more objectivity and thus perhaps to the harmonization of EIA regulations among MS.

Another interesting idea – pointed out by Austrian and German stakeholders – was of screening decisions done (exclusively) by a central EIA authority, probably as a way of increasing objectivity in the final screening decision.

Other types of recommendations concern **awareness-raising measures** and good practice guidance within each Member State. It has been mentioned that there should also be more studies on EIA practice as a means to identify main shortcomings that could be prevented in the future.

The need for more guidance as well as more research regarding EIA practice was, in fact, one of the proposals most often referred to.

Figure 56 Main ideas of the answers given to the Question "Should the Commission consider to modify the Annexes system of the Directive in order to provide for a more harmonised application of the Directive across the MSs" per country and per stakeholder

Country/ Stakeholder	Should the Commission consider modifying the Annexes system towards a more harmonized application of the Directive?	
	Maybe not, because...	Yes, because...
AUSTRIA		
Consultant	Austrian EIA system is considerably based on case-by-case examinations.	
Regional body	Case-by-case examinations provide flexibility to decide whether smaller projects should also be subject to EIA. The problem of cumulative effects of (several) smaller projects (below selected thresholds) in the same area is still unsolved.	Case by case examinations for all projects would require much time and financial resources. Mandatory lists of projects requiring EIA above specified thresholds is applicable and provides legal certainty. The definition of sensitive areas should be harmonized. The problem of cumulative effects of (several) smaller projects (below selected thresholds) in the same area is still unsolved.
National Government	The present (two Annexes) system works well because, for larger projects (mandatory list) there is no discussion on whether they should be subject to EIA or not, while case-by-case examinations for projects below specified thresholds provide flexibility to account for specific circumstances. It is difficult to change the existing system, so caution is needed when changing EU regulations. It is also necessary to consider the time gap between the lauch of new regulations and the full application of the new law.	In general, harmonized regulations concerning large and small facilities are needed. Licensing procedures of technical facilities should be harmonized.
Regional Body		Yes but, in some cases, the use of threshold values and criteria does not allow for the best evaluation of the (environmental) impacts involved. So case-by-case assessment should always be necessary.
CZECH REPUBLIC		
Consultant	Every country has its special conditions (natural, social or other) and the list of projects must reflect those different conditions.	
NGO	Two categories of projects should remain: mandatory assessment and screening.	However, considering some major and common project types for which there is already enough technical and scientific knowledge, as may be the case of wind power plants, the actual list of project types should be regularly reviewed towards more harmonized and up-to-date threshold values.
National Government	We don't find it necessary.	
Consultant	The number of project list is merely a technical detail of little relevance.	The threshold values system should be revised concerning the need for uniform market conditions throughout all MS. On the other hand, these threshold and specification values should be revised (at least once every 5 years) due to technical knowledge development.

Country/ Stakeholder	Should the Commission consider modifying the Annexes system towards a more harmonized application of the Directive?	
	Maybe not, because...	Yes, because...
GERMANY		
Regional body	Personally not a favourite of thresholds! It is very important to have in mind the overall context in each case. The EIA decision should thus be performed in every case by the EIA competent authority (based on a case-by-case approach).	
Consultant	Does not believe that achieving common standards in all member states may be attained through legislative measures. My suggestion goes to strengthening the scoping phase in order to previously define the most important impacts to assess. Furthermore, there could also be the possibility for a lighter EIA procedure for projects with minor impacts on the environment. EIA procedures are usually quite overloaded with lots of unnecessary information. [see also question No. 18]	
Others (Berlin University)		In general, criteria should be more accurately defined. The lack of objectivity in the criteria used in the screening procedure leads most of the times to the addressing of the screening decision to the competent authorities and thus subject to a great deal of discretion.
FRANCE		
Consultant		Personally I find it rather complicated: either you have an EIA or not!
National Government		The two Annexes system is a complex one, difficult to understand. It is worth trying to simplify the Annexes system but considers it a difficult task due to the main perspectives on this subject: there are those countries that rely mainly on case-by-case assessments and there are those that prefer the threshold values approach, seen as a safer one.
IRELAND		
Others (EPA)		Possibly, but thresholds should not be raised
LATVIA		
National Government	The number of Annexes is nor relevant. The principle of setting project types, criteria and thresholds is substantial.	
POLAND		
National Government	We accept the Directive.	

Country/ Stakeholder	Should the Commission consider modifying the Annexes system towards a more harmonized application of the Directive?	
	Maybe not, because...	Yes, because...
PORTUGAL		
Consultant	There should be no modifications because each country has its own special features.	
NGO	It is a less relevant issue, once there will always be certain features whose modification does not depend only in the way regulations are made. More important than the screening procedure should be a better integration of EIA with other control regimes, such as IPPC for the case of industrial licensing.	
Regional body		It is a common Directive, after all!
Researcher	Each country has its own conditions and legal system. That is why the transposition of the Directive 85/337/EEC and of its amendment – Directive 97/11/EU – resulted in so many different EIA systems and proceedings throughout the Member States that already adopted it. More important than having harmonized EIA procedures and regulations is knowing whether the environmental impact assessment practised in each and every country aims in fact at a more effective environmental protection and a better public participation in the final decision, whatever the means that are used.	
National Government	It works well as it is. Besides, each country has its own specific conditions.	
SLOVAK REPUBLIC		
Consultant	Not in that sense. However, the harmonization of the EIA and IPPC procedures should be considered in order to ensure that all projects covered by the IPPC regulations are also subject to EIA. Threshold values considered in both these Directives should be expressed in the same units, what is presently not the case.	
National Government		Yes
NGO	The principle of thresholds should be preserved.	However, threshold values should be regularly revaluated

Country/ Stakeholder	Should the Commission consider modifying the Annexes system towards a more harmonized application of the Directive?	
	Maybe not, because...	Yes, because...
SWEDEN		
Consultant		Useful for drawing up of conclusions. There is no international experience on harmonization of criteria, except for the case of Natura 2000 network.
Regional Body	We should stick to the current system: it is being assimilated by the different Member States at a regular rate now and it is good enough.	Useful, especially when It comes to transnational projects.
National Government		The number of EIAs varies greatly among the different Member States, perhaps due to different interpretations of Annex I.
NGO	The 2 Annexes system is advantageous because it provides flexibility.	Some Annex II project types should pass to Annex I.
UNITED KINGDOM		
Scottish Government	The separation between Annex I and Annex II is a means of distinguishing different kinds of impacts in terms of magnitude and significance. In spite of the advantages of having consistent EIA regulations throughout European Union Member States, the cascading effect of national, regional and local changes derived from EU Directives amendments tends to create greater confusion rather than clarification. Unless these changes would really solve the problems arising from national and regional different transposition of the EIA Directive, it could be more effective to have some clarification on the current set of criteria and regulations – focus on guidance – instead of re-amending the EIA Directive.	
Consultant	The 2-Annexes system works well in terms of clarity.	

Figure 57 Main ideas of the answers given to the follow-up Question regarding pros and cons for different approaches per country and per stakeholder

Country/ Stakeholder	Pros and Cons of the Following approches Suppression of Thresholds	Merging Annexes I and II to a single Annex with thresholds	Duplication of categories in Annexes I + II with different thresholds
AUSTRIA			
Regional Body		In general, merging of Annexes I and II is appreciated. However, in some cases, exceeding a specified threshold is not the most adequate means to describe the impact properly, so that case-by-case examinations are important as well.	
CZECH REPUBLIC			
Consultant		The number of project list is merely a technical detail of little relevance.	
GERMANY			
Berlin University	The risk of circumventing EIA through case-by-case examinations would be too high. These regulations should not ever be soft; that would be a step backwards relative to all the work done so far.	I support this approach. If, for instance, a certain project type is not relevant for a specified MS, it does not matter. Counter question: what happens below the specified threshold values? No EIA or screening procedure?	This approach is similar to the German amended EIA law. However, as in the former, distinction between “A” (general screening) and “S” (site-related screening) cases is difficult.
Consultant	I could not disagree more because it would considerably overstrain administrative proceedings and EIA procedures are already complicated enough, given the need for the assessment of cumulative and interaction effects besides regular proceedings.		
LATVIA			
National Government		The number of Annexes is nor relevant. The principle of setting project types, criteria and thresholds is substantial.	
POLAND			
National Government	Agrees because each country needs different thresholds according to individual conditions.	Does not agree. The question of having one or two Annexes is a technical one of little relevance.	No.

Country/ Stakeholder	Pros and Cons of the Following approches Suppression of Thresholds	Merging Annexes I and II to a single Annex with thresholds	Duplication of categories in Annexes I + II with different thresholds
PORTUGAL			
Consultant	Agrees but with a different screening method, based on positive lists (project types subject to EIA above specified threshold values), negative (exclusion) lists, for those projects below certain threshold values and combined lists for those projects in-between that could be screening through on a case-by-case basis. However, some exceptions must always be kept, as for the case of nuclear power plants and other projects of comparable dimension and seriousness of impact. For these EIA should, obviously, be mandatory in all cases.		
Regional body			The consideration of regional specificities would be possible and, at the same time, the application of the EIA law by the competent authorities would be easier, as there would no longer be the reason for complaints based on different regulations among different MS.
SLOVAK REPUBLIC			
NGO	Pros: there would be no projects exempt of EIA prior to a screening procedure Cons: this approach would lead the overload of administrative work by the competent authorities	Pros: simpler approach for guidance Cons: setting up thresholds would be very difficult and probably not accurate enough, especially for the case of impact accumulation situations.	Pros: not any Cons: useless repetition of activities and the impossibility for setting up threshold values for all activities.
National Government	No	No	Yes, in order to determine exactly which proposed activity comes under the (case-by-case) screening procedure or mandatory assessment.
UNITED KINGDOM			
Consultant		A single project list would lead to a more discretionary judgement of the seriousness of impacts/vulnerability of specific environments, especially in a 25-Member States European Union	

Figure 58 Main Ideas from the Answers to the Question "Can you think of any other recommendable approach for a more harmonised coverage of projects with likely significant environmental effects across the EU while leaving enough flexibility for appropriate implementation to suit national circumstances, such as the geographical and socio-economic conditions?"

Country/ Stakeholder	Can you think of any other recommendable approach for a more harmonized coverage of projects with likely significant impacts with enough flexibility for implementation to suit national circunstances?
AUSTRIA	
Consultant	Due to different population densities, adaptable thresholds are needed.
Regional body	Social aspects have to do with political decisions and thus should be addressed by other means but EIA. Social and economic issues, which usually lead to the overload of EIA procedures, should be dealt with in terms of Strategic Environmental Assessment. Despite the little experience had with SEA so far, whenever a SEA is carried out, it should contribute to the reduction of EIA extents.
National Government	Neighbour communities and NGOs should have the right to appeal in case-by-case screening assessments.
Regional Body	The analysis of a project's eligibility for EIA could be done by a central (national) EIA authority, as is done in the Netherlands. More textbooks and guidelines needed.
CZECH REPUBLIC	
Consultant	The EU should only establish basic trend lines and terms, being up to the Member States the definition of more locally specific issues.
NGO	The flexibility of threshold values setting should be kept because of different national and regional specificities. However, those projects with more significant impacts whatever the dimension – nuclear power plants, highways, … – should have their threshold values harmonized among all MS.
Consultant	The threshold values of mandatory EIA cases should be stated uniformly in all EU MS, as a means to achieve the same level of environmental protection and public information, as well as for the sake of similar market conditions.
GERMANY	
Regional body	– Screening carried out by one general office. – Less discretionary judgement up to the MS. There should be more detailed common regulations instead.
Consultant	Awareness-raising, guidance and developing recommendations for good practices as more efficient than regulatory or normative approaches. Awareness-raising processes must be initiated in the countries itself. Otherwise there will always be countries that won't take the EIA Directive seriously or will misinterpret it. – Undertaking of comparative studies on EIA practices, procedures and experiences from different countries; – improved documentation of EIAs and – reporting obligations for the MSs as means to identify good practices and better guidance.
Other (Berlin University)	Best to leave the Directive Annexes as they are, albeit having some threshold values discussed and screening criteria more accurately defined. There should be a combination between screening criteria and quantitative data, in order to avoid too much space for discretionary judgement by national/regional EIA competent authorities and, at the same time, enough flexibility for MS to suit their national circumstances. Better not to leave it up to MSs to determine which project types should be subject to EIA.

Country/ Stakeholder	Can you think of any other recommendable approach for a more harmonized coverage of projects with likely significant impacts with enough flexibility for implementation to suit national circunstances?
IRELAND	
Other (EPA)	– Reports should be made available on opportunistic EIAs – Lists of Case Law and Judicial Reviews should be made available – A review of National Guidelines should be done and then the development of European Guidelines should be considered. – The outcomes of EIA projects, particularly where there are legal challenges, need to be shared, especially the details on how they are resolved.
LATVIA	
National Government	The simplification of the EIA procedures at European level by, for instance, setting up the list of project types likely to have significant impacts on the environment.
PORTUGAL	
Consultant	The scoping stage should be mandatory
NGO	– Keeping both Annexes, extend Annex I to more IPPC industries, and let Annex II content be decided by each Member-State and – Integrate EIA with the several physical land-use policies.
National Government	– Agrees with the general framework of the EU EIA Directive. If its regulations are well applied by the MS things will eventually go just fine.
SLOVAK REPUBLIC	
Consultant	Harmonization of the screening procedures throughout MS more important than the discussion around the content of the Directive's Annexes.
National Government	Accepts the present system but is in favour of a threshold values screening methodology in all cases.
POLAND	
National Government	We accept the EU Directive but, from our point of view, we suggest to leave strict thresholds
SWEDEN	
Regional Body	Further development of the Annex III criteria towards a deeper harmonization of the tools used for the screening decision.
National Government	The starting point should be what has already been done – reference to the EU Commission's 5-year Report – although it it will require a lot of hard work to go through all the differences now existing between MS
NGO	Harmonization is not that important an objective.

Country/ Stakeholder	Can you think of any other recommendable approach for a more harmonized coverage of projects with likely significant impacts with enough flexibility for implementation to suit national circunstances?
UNITED KINGDOM	
Scottish Government	It may be necessary to accept that we will never have a perfect EIA system and tweaking it and forever adjusting it can actually almost be counterproductive. People can get tired or worn out by looking at yet another 200-300 page environmental statement rather than putting their effort into considering what the development looks like on the ground, how good are the conditions we're going to attach, how we are going to monitor it, and those things are as important.
Unknown	It would be useful to be able to interpret thresholds etc via European guidelines.
Consultant	Making the relationship between the EIA and the Habitat Directives explicit (presently this relationship is only implicitly there), so that the sensitivity of certain sites is taken formally into account as far as EIA processes are concerned. This would also contribute to the subjection to an EIA procedure of project types not included in mandatory lists, if they are to be located in sensitive sites → reference to what is made in some MS where there is an extra Annex where these cases are accounted for. Another important issue has to do with some agricultural project developments not considered by the Directive's lists of projects and that can lead to significant environmental changes, as is the case of changing in the cropping system or the use of Genetically Modified Organisms (OGMs). There are consent regimes for this type of projects but are those regimes thinking about the environmental effects? A second common problem with agricultural projects has to do with the general lack of funds for the making of the EIS, albeit the large areas that may be involved and so the possibility of significant environmental impacts arising from the changes introduced in the ecosystem.

Brief abstract of key findings

Most of the interviewees do not support the proposed changes to the EIA Directive's Annexes system. The present system is regarded as working well because it combines the use of mandatory lists with thresholds for those major projects likely to have a significant environmental impact with the possibility for MS applying the most adequate screening tools for other types of projects that can be more or less environmentally harmful given ecological, technical or social local specificities.

It is also said that the great diversity of screening procedures practiced among MSs resulted from different contextual factors – administrative (political), social and historical – and thus is not necessarily a problem in itself.

Those interviewees who are in favour of the harmonization of screening procedures by means of achieving similar levels of environmental protection among MSs see this harmonization as best attainable through the use of uniform threshold values for each type of project category as well as through the harmonization of screening criteria for increasing clarity. The better integration of EIA with other control regimes is another argument supporting the harmonization of the Annexes system.

Regarding the three options presented as to the way the present Annexes system could be changed, the suppression of thresholds's approach was highly disregarded by some of the interviewees, as being too high a risk of evasion from the EIA procedure and because it would imply drastic modifications to the present screening procedures set by the EIA Directive and gradually implemented by the MS.

Besides, some positive opinions towards the option of merging Annexes I and II such as being a simplification of screening procedures, one of the interviewees (UK – consultant) considered it would lead to higher levels of discretion in the screening decision by EIA authorities. Other responses simply regarded it as an irrelevant technical question.

Likewise, for the case of the third option – the duplicating the projects categories in both Annexes – there were both pro and against arguments, the former pertaining mainly to the higher flexibility of the system and the latter referring to it as a "*useless repetition of activities*".

Finally, suggestions were made towards the deeper harmonization of the screening procedures while maintaining enough flexibility to account for regional specificities. Essential changes to the screening procedure were considered in accordance to the interviewees's opinions about the advantages and disadvantages of more flexibility versus deeper uniformity, changes to the certain EIA procedural steps, such as a mandatory scoping phase or the deeper integration of EIA into other control regimes. Also several suggestions pertaining to EIA good practice as awareness-rising measures or more general and sectoral EIA guidance have been made.

4 KEY FINDINGS AND CONCLUSIONS

A successful implementation of the Directive may depend to a considerable extent upon the ways in which member states choose to select Annex II projects to be submitted to assessment. Differing approaches have been adopted by the various member states in determining which projects should be subjected to the EIA process and the circumstances under which they can be excluded. A further determinant of successful implementation may well be the extent to which member states set the information requirements above the minimum prescribed, both for the screening decisions and for the environmental impact statements.

The analysis results of this study mainly give the impression that EIA experts are in general satisfied with the present system at the EU and national/regional levels, both regarding legal provisions to encompass all projects which may have significant environmental impacts and present definitions and criteria. Due to the rather small sample size of responses it has been difficult to find statistically significant results and the data base did not allow any country-specific analysis. There was a wide variation among the answers, where only certain patterns could be recognised. Some issues of concern appeared as major threats throughout the responses, whereas many other responses were widely varying giving no clear pattern.

Some correlation between the answers in analyzing the Questionnaire and Interview feedback could be found identifying the following themes which seem to demonstrate barriers to successful EIA practice within the scope of this study:

- Diverging levels of environmental protection due to the present disparities in screening procedures among MSs;
- Ambiguous screening procedures (lack of transparency in screening decisions, lack of qualitative screening criteria);
- Some interpretational problems within certain sectors;
- Problems in dealing with cumulative effects;
- Developer's tendency towards staying just below the threshold value for EIA obligation; and
- Role of national/regional specificities not only regarding the geographic circumstances and the state of the environment, but also the political and commercial influence in implementing regulations.

Furthermore, it was possible to show similarities in the responses regarding potential solutions to tackle identified weaknesses such as:

- Specification of selection criteria for screening and clearer advice for practical application;
- General case-by-case analysis with robust selection criteria rather than setting fixed threshold values (corresponding to "salami-slicing", developers' tendency to stay just below value, etc.);
- Reducing overlaps in licensing procedures through enhanced co-ordination with other related Directives;

- Demand for adequate reference to the actual impacts on the environment in setting thresholds values rather than focusing on values responding to the project details;
- Providing more specific guidance;
- Knowledge sharing and greater diffusion of good practice;
- The strengthening of provision for EIA training; and
- Introducing SEA is expected to become a helpful tool to tackle some of the above mentioned issues.

In general, the harmonization of screening procedures is regarded as advantageous by most of the respondents given the present disparities in screening procedures among MSs. Converging levels of environmental protection as well as more straightforward screening methods are the main reasons supporting the increasing harmonization of EIA practice among MSs.

Several approaches to the modification of the present Annexes system have been proposed as to the way this progressive harmonization of the screening procedures might be accomplished. Respondents have been asked about their opinion concerning the advantages and disadvantages of (1) merging the two Annexes into one list of mandatory list with thresholds similar to Annex I of the EIA Directive, (2) duplicating the project lists or even (3) suppressing thresholds.

In spite of the relative advantages of each of these modifications, it has been argued that the simplification of the Annexes system would raise several legal administrative and technical problems, besides the political cost of introducing new amendments to the Directive.

EIA procedures are applied to a greater or lesser extent within development control and physical land-use planning systems, which remain national prerogatives (Glasson & Belanger, 2003). Given the considerable differences among EU planning systems and administrative practice concerning licensing procedures, it is still very difficult to foresee what a uniform European EIA system might look like. In addition, a number of countries (e.g. Belgium, Spain and Italy) have EIA regulations enacted at regional level, which makes the simplification of EIA (screening) procedures an even more difficult task.

On the other hand, discretionary judgement by the local EIA authorities will hardly cease to exist, given different environmental and social specificities, particularly in the cases of impact accumulation and sensitive areas. Case-by-case assessments, taking into account specified screening criteria (Annex II of the EIA Directive plus guidance produced at national level) was referred to by the great majority of the respondents as the only means to account for local conditions and thus properly forecast the environmental effects of a certain development project. In fact, as Weston (2000) suggests regarding the British case, "*while indicative thresholds can help the process, much of screening still relies upon professional judgement*"[36] (page 197).

But most important of all is to realise that impact significance assessment involves the use of both *predetermined* criteria (previously established) and *judgemental* criteria (Weston 2000), even when setting up threshold values, as Wood and Becker (2005) point out. Deciding e.g. upon the number

[36] Weston, J. (2000): EIA, Decision-making Theory and Screening and Scoping in UK Practice – Journal of Environmental Planning and Management, 43(2), 185–203

of sows a pig farm must have in order to be subject to an EIA procedure will always be a political decision, based on social, economic and cultural values besides scientific knowledge (Wood & Becker, 2005). Besides, impact significance chiefly depends on the perception of the risks a certain project development poses to the environment. Public concern and pressure can thus lead to subjecting certain projects to EIA despite their exemption according to more traditional screening criteria evaluation (Gonçalves, 2002, Wood & Becker, 2005).

Most countries (e.g. Austria, Czech Republic, Denmark, Hungary, Latvia, Malta, Portugal, Slovenia, Spain and Sweden) have introduced additional project types to their screening lists or set stricter threshold values above which EIA is mandatory in all cases. The increasing experience with EIA practice has led to an increasing demand for environmental protection as well as to a better understanding of environmental processes and its relations towards several development projects.

Considerations of amendments to the EIA Directive should incorporate some of the above mentioned suggestions towards a more harmonized EIA practice among MSs but it may hardly and questionably lead to the complete simplification of (screening) procedures. In other words, present screening arrangements have an important room for improvement, albeit keeping the existing rationale, i.e., maintaining a *controlled flexibility* through the two Annexes system.

Despite the obvious scope for improvement in the above mentioned issues of concern, it is noteworthy that any change to the Directive or any other regulation should be considered carefully. This study can only offer some advice in this field. Further investigations particularly focusing on technical details would be needed to underpin the need for taking action in terms of how the identified concerns could be efficiently solved.

In the short term, some weak points of the European practice in the use of EIA could be tackled with non-legislative actions, such as greater diffusion of good practice, better provision and use of EIA guidance, better focused EIA research and the strengthening of provision for EIA training.

In due course, a well justified amendment of the EIA Directive could be necessary to further support the successful application of EIA in Europe.

5 POLICY OPTIONS

This chapter presents a range of policy options on how a more consistent coverage of project types that should be subject to EIA can be achieved. Drawing on the findings of this study it has been possible to identify six policy options which encompass the range of actions that the European Commission could take to improve the implementation of EIA with regard to project types subjected to EIA. The development of a series of policy options, as opposed to a simple list of recommendations, is a more robust approach as it recognizes that different levels of action are possible and that each has advantages and disadvantages. By doing so, our aim is to provide a solid basis for informed discussion and decision-making on the various ways forward.

The six policy options are:

1. Policy Option 0: Zero option: No change/do nothing
2. Policy Option 1: Guidance plus supportive measures
3. Policy Option 2: Minor amendment to the EIA directive plus supportive measures
4. Policy Option 3: Moderate amendment to the EIA directive plus supportive measures
5. Policy Option 4: Major amendment to the EIA directive plus supportive measures
6. Policy Option 5: Radical amendment to the EIA directive plus supportive measures

Figure 59 provides a summary of the regulatory and supporting measures that form the basis of each of the six options. The following sections describe each of the six main policy options in greater detail and list their advantages and disadvantages in the form of a SWOT-Analysis.

		Guidance		Supportive measures							Regulatory measures Amendment to EIA Directive			
Policy option [European policy level]		Upgrade	New guidance	dissemination activities	Awareness-raising	training	knowledge-sharing	research	coordination of procedures	implementation support	Changes to Annex III	Changes to Annex II	Changes to Annex I+II	New Annex
0	No change/Do nothing													
1	Guidance plus supportive measures	X	X	X	X	X	X							
2	Minor amendment to the EIA directive plus supportive measures	X				X	X	X	X	X	X			
3	Moderate amendment to the EIA directive plus supportive measures	X		X	X	X	X	X	X	X	X	X		
4	Major amendment to the EIA directive plus supportive measures		X	X	X	X	X	X	X	X	X		X	
5	Radical amendment to the EIA directive plus supportive measures		X	X	X	X	X	X	X	X	X			X

Figure 59 Overview Policy Options

5.1 General remarks

Harmonisation across the EU in the application of environmental Directives while ensuring sufficient implementation regarding the purpose of the Directives is a challenging task. Legislation introduced to meet imposed policy objectives depends largely on existing institutional frameworks within countries, as well as past practice. For example, the land use planning systems vary greatly across the EU, with some countries requiring both planning and environmental permits, others having a single authorisation procedure. There are also other licensing procedures in place deriving either from national requirements such as from other EU directives, which potentially cause overlaps and show differences in their national implementation. But not only do the institutional frameworks vary largely, but also the state of the environment such as social and economic circumstances differ from state to state. Significant impacts on the environment mainly result from a combination of the nature of a project and the site sensitivity, which may also vary largely between the MSs. Clearly this diversity necessarily leads to differences in implementation.

Therefore, it is crucial while considering a system to cover all project types with likely significant effects on the environment through the EIA directive to leave enough flexibility for the Member States to meet their national/regional circumstances, while at the same time safeguard a robust mechanism for a consistent coverage of those project types.

The Commission's Five Year Report "On the Application and Effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC): *How successful are the Member States in implementing the EIA Directive?*" emphasises that Member States have to step up implementation of the Directive. It was revealed that there were still some Member States who have not implemented the EIA directive, some four years after the deadline had passed. About 30% of open infringement cases concerned gaps identified by the Commission in national laws intended to transpose the directive. But about 65% of the infringement cases concern bad application of the directive in relation to individual projects. Therefore EIA is one of the sectors of Community environmental law where Member States have the worst implementation record.

Nevertheless, there are several reasons why amendments to the EIA Directive are not on the short term agenda. One is the recently adopted amendment that introduces additional obligations with regard to public participation and access to justice (in line with the Aarhus Convention; (Directive 2003/35/EC)) and which has to be transposed by the Member States. Another reason is the adoption of the SEA Directive on the assessment of the effects of certain plans and programmes on the environment should have been transposed by Member States by 21 July 2004 and is still an ongoing process. In some Member States the strong link with the EIA Directive could strengthen the administrative capacities of the respective authorities in their assessment procedures and will complement in many cases the application and better implementation of the EIA Directive. Implementation of the SEA Directive may also reveal additional difficulties in environmental assessment practices that need to be taken into account in a future amendment of the EIA Directive. In the long term, a well-founded amendment of the EIA Directive may be necessary to further support the successful application of EIA.

Meanwhile the Commission can improve implementation of the directive and tackle implementation gaps by continuously monitoring the directive's enforcement and by preparing guidance in consultation with member states, the new member states and stakeholders like NGOs, local and regional authorities and industry. Also targeted research activity and encouraging capacity building programmes will contribute to an enhanced application of the EIA directive.

Building on the IMP (3) research results, the formulation of the policy options follows a line from “zero action/do nothing” option to a “radical change” option. Each policy option contains a combination of supportive and regulative measures, which should be seen as potential examples of actions that could be taken by the Commission to enhance the Directive’s application in terms of proper assessment of projects likely to cause adverse impacts. This line of increasing potential actions described in the policy options should be seen as interrelated to a time factor starting with short term activity and moving to long term changes. Each option contains a combination of supportive and regulative measures as potential examples of actions, but various combinations are possible and more than likely useful. Engaging in areas of supporting, coordination or complementary action can be traced from short- to medium-term, whereas more regulative mechanisms could be tackled long-term by building on growing experience and knowledge.

It should be emphasized that, before taking up any suggested action, the actual need for complementary measures and/or changes to the Directive should be considered carefully. The following potential options to tackle identified concerns can only offer some advice in this field. Further inquiries would be necessary to underpin the need for taking certain actions combined with an outcome analysis of parallel ongoing studies in terms of how the identified issues of concern could be efficiently solved. An enhancement of the Directive’s application can only be obtained through taking measures that are underpinned by a well-founded knowledge base.

5.2 Policy Option 0: “Zero option: No change/do nothing”

5.2.1 Description

The “zero” option assumes that:

- Screening will continue to be based on the present Annexes system: Annex I for mandatory projects, and Annex II which include projects subjected to certain thresholds defined by MSs. The EU Directive also contemplates the possibility of a case-by-case analysis. This type of approach is part of the screening method in several countries;
- Types of projects listed in Annex I+II to the Directive will remain untouched; and
- Present criteria/thresholds and definitions used in the Directive persist.

A SWOT-Analysis for Policy Option 0 is provided on the next page.

5.2.2 SWOT Analyses

SWOT-Analysis Policy Option 0

Strengths	Weaknesses
▪ No cost ▪ No additional work required ▪ No political bargaining ▪ No change to legislative, guidance and institutional frameworks ▪ Comfortable to most MSs as existing systems can be kept	▪ No progress or slow progress ▪ Diverging approach across Europe ▪ No adjustment to technical developments regarding adapting certain thresholds and/or introducing new project types ▪ Missing links to the requirements deriving from other Directives such as remaining overlaps ▪ Missing co-ordination with requirements of the SEA Directive ▪ Uncertainty remains in interpreting certain definitions ▪ Legal uncertainty for screening decisions remains ▪ Heterogeneous implementation among Member States will continue to cause problems in the transboundary context
Opportunities	**Threats**
▪ The present situation allows for a certain degree of freedom of MSs in defining their national screening system such as keeping the screening system according to national/regional EIA procedure ▪ The determination of different screening systems enables the consideration of national specificities ▪ Coverage of project types subject to EIA results from taking national/regional specificities into account ▪ MSs have to account for potentially adjusting the setting of criteria and/or thresholds due to national/regional frameworks ▪ Further experience with present application can be gained ▪ By keeping the present regulatory system resources can be used for improving EIA practice	▪ ECJ such as national court rulings are often needed – time- and cost- intensive ▪ Lack of more specified screening criteria gives rise to situations of infringements among MSs ▪ Lack of harmonization between screening systems among MSs originates problems in the case of projects causing transnational impacts; ▪ Level of dissatisfaction with application increases for certain issues ▪ Application does not fulfill the purpose of the Directive anymore throughout all MSs ▪ Double assessments through obligations from other Directives and/or regulations ▪ New project types with likely significant effects will not be covered

Concluding remarks

Deciding to not take action will depend mainly on political appreciation of values, whether the identified strengths and opportunities of this Option give strong enough arguments to accept the inherent threats. Keeping the present situation allows for gaining more experience with the existing system, which could provide a more profound basis for future amendments. Having in mind though that changing the legal regulations will require a long period of time, it could be argued that recognizing the identified weaknesses and threats it would be recommendable to take action soon, either in areas of supporting and complementary action and/or regulative measures.

Figure 60 SWOT-Analysis for Policy Option Zero

5.3 Policy Option 1: Guidance plus supportive measures

5.3.1 Description

Key issues: enhancement of existing guidance and/or elaborating new guidance plus supportive measures

This Policy Option concentrates on “soft” measures to enhance the application of the Directive with regard to the WP focus without changing it as such. This would e.g. include a revision of the existing EIA – Guidance on Screening (EC, 2001) such as the screening checklist and the preparation of new guidance for clarifying certain definitions (also with respect to co-ordination with other relevant EU Directives) and/or the application of project types (Annex I & II). In addition, new guidance would also refer to the selection criteria applied to Annex II projects (Annex III). New guidance for accumulation assessment with particular regard to linkages to the SEA directive could also be considered. Policy Option 1 will also cover further potential supportive measures, which the Commission could consider to engage in, such as offering training for implementation and support mechanisms for knowledge sharing etc.

Enhancement of existing guiding material should focus on:

- Improving and extending the existing EU EIA Guidance on Screening – update of the screening checklist
- Improving and extending the existing EU EIA Guidance on Scoping
- Review of the guidelines on the Assessment of Indirect and Cumulative Impacts as well as impact interactions
- Review of the EU EIA review checklist with particular regard to linkages to SEA
- Improved definition for “sensitive areas” – link to Habitats Directive

Developing **new guidance** should in general address the following issues:

- Co-ordination with other Directives through clear interpretations or additions to varying definitions to avoid overlaps and support a mutual complement (potentially over IMPEL Network)
- Harmonization of the EIA Directive with the relevant international conventions and agreements regarding lists of project types and descriptions
- Licensing procedures (e.g. different procedural approaches for small/large facilities)
- Improved application of screening criteria
- Cumulative effects assessment
- EIA Follow-up and Monitoring
- Biodiversity and EIA

One application of EIA guidance materials in general is to urge proponents to incorporate environmental issues and considerations into the design stages of a project. To further increase the

effectiveness of guidance materials, greater industry consultation during formulation of guidance is recommended.

Overall, Guidance should represent complementary regulation as minimum standards rather than purely offering advice. Environmental checklists and other practical tools for appliance could be helpful.

Training could address:

- Screening as a part of the EIA process with emphasis on improving the practical application
- Managing effective environmental assessments, including:
  – scoping,
  – identifying and predicting environmental effects,
  – evaluating significance,
  – reporting EIA findings,
  – involving the public,
  – mitigating environmental effects, and
  – quality assurance.
- Public participation
- E-learning

Knowledge Sharing by establishing a platform for dialogue and information exchange that could take place at different levels:

- Interactive internet platform as a discussion forum
- Establishing Stakeholder dialogue through organizing workshops (capacity building)
- Funding research activities on selected issues (deriving from Internet Platform and/or Stakeholder Dialogue)
- Building up a database with relevant material provided by MSs, running on the EC website and providing resources to keep this database updated
- Encouraging MSs to provide information for distribution in English
- Reactivating EIA centres as national Information-Centres such as searching for existing structures and information lines (e.g. IAIA society, conferences, networks) and using them.

A SWOT-Analysis for Policy Option 1 is provided on the next page.

5.3.2 SWOT Analyses

SWOT-Analysis Policy Option 1

Strengths	Weaknesses
▪ Builds on what already exists ▪ Commission takes a significant leadership role ▪ Likely to be cost-effective in terms of the time, money and personnel involved and the likelihood of improvement ▪ Supports Member States' progress and therefore likely to be taken up by most stakeholders ▪ Builds on and uses existing regulatory and institutional frameworks ▪ Flexibility in the implementation of Directive would still be preserved	▪ Long term financial, personnel and resource support needed ▪ Lack of legal clarity ▪ Diverse interpretations of guiding material could again lead to uneven implementation ▪ Lack of visibility on the political agenda
Opportunities	**Threats**
▪ Increases and enhances co-operation between EU Directorate Generals (DGs) and between Member States ▪ Member States can continue to develop at their own pace and in a way that suits their own national circumstances ▪ Could Improve EIA practice significantly. ▪ Member States can use support to enhance their own national guidance ▪ Clarification regarding application of criteria such as for project type definitions through improved guidance material and other supportive measures would guarantee more reliance in EIA procedure ▪ Improved Guidance on the screening system would ensure a certain degree of harmonization between MSs ▪ Enhancement of guiding material could reduce conflicts arising from projects likely to generate transnational impacts and from transnational projects subjected to EIA ▪ Provides an opportunity to bring together, review and highlight best practice at the EU and international level (Knowledge sharing!) ▪ Specifying the set of criteria and providing guidance on how to apply those will contribute to a more harmonized implementation dealing with certain project categories	▪ No or slow progress in some Member States because these are supporting measures and guidance only ▪ Improved guidance will not be taken up by Member States ▪ Continuing potential for divergent progress between Member States ▪ Practice does not significantly change across the EU ▪ New guidance continues to be ignored and underused ▪ Take-up of supporting measures and new guidance is dependent on willingness and active interest of Member States and EIA stakeholders

Concluding remarks

Engaging to take action in the field of supportive and complementary measures is likely to be most effective with regard to short- to medium-term enhancement of EIA application. This would also meet the requirements of Section 6, Art. III-185 of the European Convention in terms of improving the system of information exchange across the Member States and the Union as well as supporting training schemes and providing for administrative cooperation. Nevertheless, it may be expected that the identified gaps and discrepancies across Europe can not be tackled entirely with only guidance and supportive measures.

Figure 61 SWOT-Analysis for Policy Option 1

5.4 Policy Option 2: Minor amendment to the EIA directive plus supportive measures

5.4.1 Description

Key issues: Annex I+II remain untouched; changes to Annex III combined with supportive measures

Policy Option 2 suggests to keep Annex I and II according to the present EIA Directive and introduce an extended set of project selection criteria in Annex III. This option would also reflect risk and health concerns, the emergence of new types of projects, the introduction of the SEA Directive and the opportunity to align selection criteria with other environmental policy Directives. In addition to changing Annex III, this option would also contain relevant supportive measures mentioned in Policy Option 1.

Introducing an extended set of selection criteria in Annex III would have to include considerations about:

- Determination of **significance**[37], i.e. whether a project is likely to cause significant adverse environmental effects. This should in general include:
  - Criteria for deciding whether the environmental effects are adverse (e.g. through comparing the quality of the existing environment with the predicted quality of the environment once the project is in place using certain indicators);
  - Extended Set of Criteria for deciding whether the adverse environmental effects are significant (adding provisions to use environmental standards, guidelines or objectives – e.g. if the level of an adverse environmental effect exceeds the standard, guideline or objective, it may be significant; introducing quantitative risk assessment criteria (including health concerns);
  - Criteria for deciding whether the significant adverse environmental effects are likely to occur (in addition to the probability of occurrence – also combined with quantitative risk assessment (also including health concerns) – the scientific uncertainty should also be taken into account and weighted)

  The question of significance within EIA procedures has created difficulty from the outset and has been the most frequent cause of litigation within EIA over the years. The determination of whether a project may have a significant effect on the environment calls for careful judgement on the part of the competent authority involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.

  In setting criteria for evaluating the significance of the environmental effect of a project, direct physical changes[38] and reasonably foreseeable indirect physical changes[39] in the environment which may be caused by the project should be considered.

[37] Following the approach for deciding whether a project is likely to cause significant environmental effects under the Canadian Environmental Assessment Act; Canadian Environmental Assessment Agency (1994): Reference Guide: Determining Whether A Project is Likely to Cause Significant Adverse Environmental Effects.

- Methodical approach for the **screening decision**
  - Basic provisions for how to use screening criteria to come to a transparent and thorough decision

  Except for defining the selection criteria more accurately, there is a need for introducing mechanisms on how to use the criteria. Clear advice should be given regarding which and how criteria should be applied for the screening procedure. It would also be recommendable to set up provisions for quality assurance in the proper use of selection criteria. This goes in line with enhancing transparency in screening decisions and could lead to a more consistent approach to screening.

Guidance and supportive measures to changes to Annex III could particularly address methodical approaches for the screening decision. Guidelines could also include environmental checklists with examples and information on determining the level of significance of project impacts. Provisions for a more profound and unified approach in selecting project types to be subjected to EIA will likely contribute to a more harmonized application of the Directive. It would also provide for a higher legal certainty for the screening decisions. Guidance could be elaborated by establishing a working group with representatives of all Member States to build on existing knowledge and experience.

In addition to the above mentioned key issues of Policy Option 2, the Commission could also consider to implement provisions for e.g. elaborating guidance notes and/or regulations in the Directive. This would mirror a more regulative approach for the considered changes and it would provide an option to bind Member States to following a certain way of implementation.

A SWOT-Analysis for Policy Option 2 is provided on the next page.

[38] A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project.

[39] An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project.

5.4.2 SWOT Analyses

SWOT-Analysis Policy Option 2

Strengths	Weaknesses
▪ Easy to implement by MSs ▪ Contributes to further harmonization of the EIA application throughout ▪ Introduces new and clearer concerns on e.g. health and risk ▪ Is able to address the necessary coordination of EIA and SEA procedures concerning the selection of projects for assessment ▪ Adapts existing selection criteria to the emergence of new types of projects	▪ Requires an amendment to the present EIA Directive ▪ Doubtful cost-effective results in view of the likely minor changes ▪ Likely modest results in terms of the harmonization of screening procedures among MSs
Opportunities	**Threats**
▪ Keeps a flexible approach to screening, updating and enlarging the respected selection criteria ▪ Provides an additional tool to align EIA with other environmental policy Directives/regulations (particularly SEA) ▪ Provides for a higher legal certainty for Member States for their screening decisions ▪ Simplifies the process of excluding those projects for which EIA is clearly not required ▪ Constitutes a firmer basis for screening decisions which reduces administrative burden for competent authorities ▪ Provides for a more robust and transparent approach in defining project types with likely significant effects ▪ Seizes the chance to reduce possibilities to circumvent EIA obligations	▪ May result in irrelevant changes to existing national EIA legislations ▪ Likely negative reaction from MSs that will be faced with the need to change existing legislation in minor aspects ▪ Denial of acceptance in Member States to implement changes which likely interfere with national/regional screening system ▪ Revising the EIA Directive's Annex III may hold the risk that other issues could be put on the political agenda, which potentially lead to other changes too

Concluding remarks

Changes to Annex III to the EIA Directive as proposed by this policy option constitute a possible solution to the different interpretations of the present definition of project types in both Annex I and Annex II. These changes could also trigger future amendments to national legislations concerning the alignment of EIA with other Directives and European Regulations, such as the SEA or the IPPC Directive.

However, this policy option has to be regarded as a modest contribution to the overall improvement and harmonization of the implementation of the EIA Directive by MSs.

Figure 62 SWOT-Analysis for Policy Option 2

5.5 Policy Option 3: Moderate amendment to the EIA directive plus supportive measures

5.5.1 Description

Key issues: Annex I remains untouched; changes to Annex II regarding change of listed project types combined with supportive measures and relevant changes to Annex III

Policy Option 3 proposes a revision of the list of project types included in Annex II reflecting the emergence of new types of projects with likely significant impacts and/or a reclassification of other project types with minor relevance regarding their significant impacts, if applicable. In particular a revision should also address an enhanced linkage of the EIA and SEA directive (e.g. removal of project types/activities from the EIA requirement, which should rather be assessed through SEA) and/or harmonization with other related Directives. Policy Option 3 would also recommend to combine changes to Annex II with a revision of Annex III, introducing an extended set of selection criteria, such as supportive measures. Therefore Policy Option 3 includes all relevant actions proposed in Options 1 and 2. Annex I would remain unchanged.

A revision would in particular address:

- Review of project categories listed in Annex II considering:
  - emergence of new types of projects with likely significant impacts and/or
  - reclassification of other project types with minor relevance regarding their significant impacts and/or
  - determination of thresholds for certain Annex II project categories (e.g. holiday villages, construction of roads, associated developments for tourism and leisure) with particular regard to potential overlaps to Annex I categories.

The following addition of new categories could be contemplated, based on the responses to the questionnaire sent to prepare the Commissions 5 years' report[40] combined with the Questionnaire and Interview analysis from IMP (3):

Project category	Suggested by the majority[41] of Stakeholders addressed within IMP³	Suggested by MSs mentioned in the 5 years report
Golf courses		
Installations working with certain Genetically Modified Organisms (GMOs) or pathogenic micro-organism such as laboratories, test facilities, trial areas		
Military practice grounds		
Masts for mobile phones and radio or telecommunication stations		
Business parks		
Redevelopment of contaminated land		
Transshipment depots		
Installations for the manufacture of particle and fibreboard		

Figure 63 Additional project categories suggested within IMP³ and the 5 years report

40 Report from the Commission to the European Parliament and the Council on the application and effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC). How successful are the Member States in implementing the EIA Directive.

41 „Majority" refers to: Ticked in the Response to the Questionnaire by more than 40 % of the Stakeholders and mentioned by at least two Interviewees. Project categories mentioned either only in the Responses to the Questionnaire or by Interviewees are not listed here.

5.5.2 SWOT Analyses

SWOT-Analysis Policy Option 3	
Strengths	**Weaknesses**
▪ Substantial demonstration of the Commission's commitment to improving environmental protection ▪ Member States obliged to take action ▪ Supports Member States' progress ▪ Likely provides for a more consistent approach across Member States.	▪ More effort and financial and personnel resources needed than Options 1 and 2 ▪ Will take longer to implement than Options 1 or 2 ▪ Politically more sensitive than Options 1 and 2 ▪ Reconcilement of national interests could be difficult
Opportunities	**Threats**
▪ Deeper and more sustained progress in EIA process. ▪ Will drive change and hence be even more effective than Options 1 and 2 at effecting change in EIA practice ▪ Supports better co-ordination between Member States, in particular regarding the transboundary sector.	▪ Some Member States and EIA stakeholders are likely to be very resistant to amending the Directive ▪ Changes to the Directive may still lead to little improvement in EIA practice within Member States
Concluding remarks	
Due to the changes which have been realized in the revision of Annex II, combined with the measures outlined in Policy Option 2, significant improvement to the application of EIA is expected. However, it will not provide for the obligatory assessment of certain additional types of projects, which, based on their significant impact on the environment would warrant an EIA process. It is therefore necessary to consider very carefully the required effort and expected outcome in terms of a more consistent and comprehensive capture of project types with likely significant adverse effects.	

Figure 64 SWOT-Analysis for Policy Option 3

5.6 Policy Option 4: Major amendment to the EIA directive plus supportive measures

5.6.1 Description

Key issues: Changes to lists of project types in Annex I & II including a revision of all project type descriptions, thresholds, and the selection criteria to be applied (Annex III) combined with supportive measures

Policy Option 4 proposes a revision of the lists of project types included, at present, in Annex I and Annex II, with possible reallocations of project types between these two Annexes and/or introduction of additional project types. This reflects the implications of the emergence of new types of projects and/or the possible reclassification of project types with minor relevance regarding their significant impacts, if applicable. Furthermore, a revision would in particular address linkages to the SEA Directive. This option would also be combined with a revision of Annex III, taking all relevant actions of Policy Options 1 and 2 into account and implement further supportive measures.

A revision would in particular address:

- Review of project categories listed in Annex I+II considering:
  - Linkages to other Directives and in particular the SEA directive;
  - emergence of new project types to be added;
  - reclassification of project types with minor relevance regarding their significant impacts.

  At present, the SEA- and EIA-Directives are only directly linked in one way (article 3(2) of Directive 2001/42/EC requires SEA for those plans and programs, which set the framework for future development consent of EIA projects). Having the concept of tiering in mind, a linkage of SEA- and EIA-Directives regarding the assessment of activities with likely adverse effects on the environment could e.g. consider the following issues:
  - Raising the assessment of cumulative impacts, indirect effects and large-scale effects to the strategic level and unburden EIA procedures – removal of categories, where such impacts are likely inherent (e.g. urban development, major windfarms);
  - Special provisions for the transport sector.

  As for an improved co-ordination with the SEA Directive, the results of the recently published study on 'The Relationship between the EIA and SEA Directives' (2005)42 in particular should be taken into account.

  A consideration of adding new categories to the Directives Annexes could follow the suggested project types listed under Policy Option 3. Within these categories Figure 65 shows suggestions made by IMP³ Stakeholders for which project types an assessment should be mandatory and/or should be subject to a specified criteria/threshold.

[42] Imperial College London Consultants (2005): The Relationship between the EIA and SEA Directives. London.

Project category	Mandatory assessment	Subject to a specified criteria/threshold
	Suggested by the majority of Stakeholders addressed within IMP³ and MSs in the 5 years report	
Golf courses		
Installations working with certain Genetically Modified Organisms (GMOs) or pathogenic micro-organism such as laboratories, test facilities, trial areas		
Military practice grounds		
Masts for mobile phones and radio or telecommunication stations		
Business parks		
Redevelopment of contaminated land		
Transshipment depots		
	Suggested by MSs mentioned in the 5 years report	
Installations for the manufacture of particle and fibreboard		

Figure 65 Allocation for suggested project categories in "mandatory" and/or "subject to a specified criteria/Threshold"

- Review of the present project type definitions and thresholds:
  The need for a review arises from concerns that, in the past, incomplete or unclear project descriptions have led to legal uncertainties in the screening decisions such as the Annex I threshold set does not provide the right trigger in some cases. Effective project descriptions bring greater efficiency and predictability. Well-defined project descriptions will also contribute to connect the various planning levels.
  [*Annex I shows a table which could provide a basis for considerations regarding a revision of Annex I project definitions. It contains relevant project definitions from other directives, guidance materials such as from other sources and identifies open questions for further elaboration.*]

- Revision of Annex III as suggested in Policy Option 2
  A Revision of Annex III should include the actions proposed in Policy Option 2 with additional criteria linking the strategic (SEA) with the operational (EIA) level, such as e.g.
  - Proposed development activity shall be (originally) included in the relevant plans and programs.

  This would strengthen SEA while at the same time unburden EIA.

5.6.2 SWOT Analyses

SWOT-Analysis Policy Option 4	
Strengths	**Weaknesses**
▪ Member States obliged to take action ▪ More consistent decision-making across Member States ▪ Respond to MSs concerns about certain vagueness in project type descriptions ▪ Alignment of the EIA Directive's Annexes to other Directives ▪ Adjustment to technical developments regarding adapting certain thresholds and/or introducing new project types	▪ High effort and resources needed ▪ Political bargaining will be necessary ▪ Long time span has to be calculated until changes become effective ▪ Difficult to establish and agree upon robust thresholds/criteria for new project categories
Opportunities	**Threats**
▪ Allows for greater harmonization regarding coverage of project types with likely adverse significant effects on the environment ▪ Better co-ordination with other Directives will consolidate licensing procedures and therefore reduce duplication and overlap with other approval systems ▪ Particularly a closer linkage of SEA and EIA through an efficient tiering concept will avoid duplication in the production of knowledge ▪ Effective project type descriptions will allow for higher legal certainty in the screening decision and thus contribute to saving of time and cost for the competent authorities ▪ Contributes to an improved application of EIA in the transboundary context	▪ Some Member States and EIA stakeholders are likely to be very resistant to amending the Directive ▪ Transposition of the amendments and necessary alignments to national framework could likely again produce inhomogeneous application
Concluding remarks	
If changes to the Directive are considered it is important to start as soon as practicable as a long time span has to be calculated until changes become effective. A stakeholder conference ("Think-tank") could be a starting point to gather expert knowledge and experience. This could reduce the inherent weakness of this option regarding resource and cost intensity through building on existing expert skills. The most difficult threat to overcome is more than likely getting political support and endorsement from the Member States, which is vital for negotiating changes and introducing them into national frameworks.	

Figure 66 SWOT-Analysis for Policy Option 4

5.7 Policy Option 5: Radical amendment to the EIA directive plus supportive measures

5.7.1 Description

Key issues: Abolishing Annex II entirely with consequential changes to Annex I leading to a simplified list of projects with indicative or guidance thresholds and criteria, where EIA must be considered. Additionally, inclusion or mandatory thresholds and criteria, where EIA is required combined with necessary supportive measures.

Policy Option 5 proposes an introduction of a new screening procedure based on a single list of project types (an enlarged version of present Annex I), with indicative or guidance thresholds and criteria where EIA must be considered, and inclusion or mandatory thresholds and criteria, where EIA is required following the so-called "traffic light approach"[43].

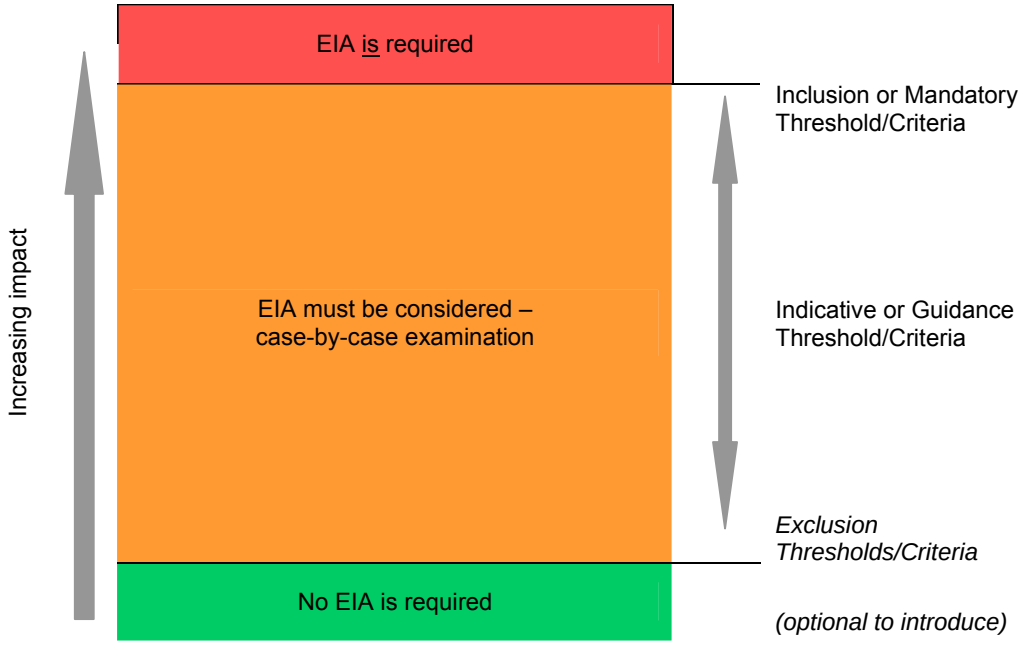

Figure 67 'Traffic-light' approach to screening

For each listed project category mandatory criteria/thresholds would be set, where projects above these thresholds will require mandatory assessment. Projects below the mandatory thresholds need a case-by-case examination undertaken by the competent national authority, which must formally decide whether or not a project would or would not be likely to have significant effects on the environment. It could be left optional for Member States to additionally introduce exclusion thresholds/criteria, where projects below these thresholds will not require EIA. Exclusion thresholds will need to take into account not just the scale of any development but also the sensitivity of its location and other criteria (e.g. cumulative effects) in Annex III. All Criteria/thresholds must be precisely defined for each project category and with the intention to be applied by all Member

[43] 'traffic light' approach to screening: combination of inclusion thresholds (EIA always required – Red), exclusion thresholds (EIA never required – Green) and indicative or guidance thresholds (EIA may be required – Amber). (see also: Report from the Commission to the European Parliament and the Council on the application and effectiveness of the EIA Directive (Directive 85/337/EEC as amended by Directive 97/11/EC). How successful are the Member States in implementing the EIA Directive, p.3).

States. National legislation and regulations could in any case, add other categories to this European list, defining for these categories, similar or different EIA procedures according to national and regional circumstances and EIA practices.

A single list of projects would reflect an analogous approach such as that used in other related EU Directives and a closer linkage of the screening procedure with the actual impacts on the environment. Indicative thresholds and criteria would also leave the flexibility to adjust Member States legislation and regulations to national and regional circumstances and EIA practices. This radical change of the present Annexes system would by all means need supportive measures such as new guidance and training.

5.7.2 SWOT Analyses

SWOT-Analysis Policy Option 5

Strengths	Weaknesses
▪ Leads to a deeper harmonization of screening procedures among MSs ▪ Allows for EC's broader control over the EIA system of MSs ▪ Provides economic agents with similar competition conditions throughout the European market ▪ Reflects an analogous approach used in other related Directives ▪ Reduces overlaps with other related approval systems ▪ Constitutes a robust and transparent system	▪ Is bound to further increase the selectivity of the EIA process (a single Annex is likely to have fewer project types than the present Annex I + Annex II) ▪ Shows less flexibility inherent to the application of different criteria and thresholds ▪ Difficult to implement by MSs ▪ Reduces the scope to address cumulative impacts generated by close-by developments
Opportunities	**Threats**
▪ Reduces misunderstandings in transboundary conflicts ▪ Leads to a higher environmental protection ▪ The need to assess on a case-by-case basis whether or not a project needs EIA in case it falls below the thresholds defined in the single list will result in a more responsible and proactive role of environmental administration	▪ It is likely to attract significant opposition of MSs ▪ May lead to an overload of administrative work in the case of those MSs with centralized EIA administrative procedures with little experience in case-by-case assessments ▪ May reduce the discretionary powers of MSs environmental authorities in an environmental policy tool that is expected to promote public participation in decision-making

Concluding remarks

Abolishing Annex II corresponds to a loss of flexibility concerning the way different projects types are regarded and dealt with by each MS.

The increase of the number of projects subjected to mandatory EIA, as well as the possibility for case-by-case analysis in those countries where this is a seldom applied screening method may result in a more demanding Directive and, consequently in higher levels of environmental protection. It might also lead to a more active role played by EIA authorities in case-by-case analysis.

However, given the risk of serious disruptive effects over national legal systems, Policy Option 5 constitutes a demanding amendment to the present Directive and is –at present sight – more than likely unrealistic in terms of acceptance across the EU 25.

Figure 68 SWOT-Analysis for Policy Option 5

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6.3 Links to related sites

The homepage of the European Commission on EIA:
http://europa.eu.int/comm/environment/eia/home.htm

The homepage of the European Commission on the Implementation of Environmental Law:
http://europa.eu.int/comm/environment/law/index.htm

European EIA/SEA centres:
http://www.europa.eu.int/comm/environment/eia/contacts2.htm

The homepage of the European Commission on European Environmental Communication Networks: http://europa.eu.int/comm/environment/networks/index_en.htm

The homepage of UN ECE Convention on EIA in a transboundary context:
http://www.unece.org/env/eia/

The homepage of the European Court of Justice:
http://curia.eu.int/en/index.htm

The homepage of the European Convention:
http://curia.eu.int/en/index.htm

Manchester University EIA Centre (UK):
http://www.art.man.ac.uk/EIA/eiac.htm

Netherlands Commission for EIA (Commissie MER):
http://www.eia.nl/ and its database (focusing on SEA):
http://www.commissiemer.nl/nceia/database/index.htm

International Association for Impact Assessment (IAIA) (based in the US):
http://www.iaia.org/index.htm

The homepage of the Canadian Environmental Assessment Agency:
http://www.ceaa-acee.gc.ca/index_e.htm

The homepage of the (NEPA) Task Force established by the Council on Environmental Quality (CEQ): http://ceq.eh.doe.gov/ntf/

The Australian EIA Network:
http://www.deh.gov.au/epbc/assessmentsapprovals/

ANNEX

General survey project type descriptions, Annex I of the EIA Directive

Annex I	Binding interpretations from ECJ	Project definitions from EU Directives International Agreements (Conventions, Bi-, Multilateral Agreements)	Project definitions from EC guidance documents, Integrated Pollution Prevention and Control (IPPC) Reference Document	Project definitions in national documents in MSs Guidance documents issued by International organisations	further comments	questions for further elaboration	relation to Annex II	BREF
1. Crude-oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 tonnes or more of coal or bituminous shale per day.					The main considerations are likely to be the scale of development, emissions to air, discharges to water, the risk of accident and the arrangements for transporting			Reference Document on best Available Techniques for Mineral Oil and Gas Refineries (Feb 2003)
2. Thermal power stations and other combustion installations with a heat output of 300 megawatts or more, and - nuclear power stations and other nuclear reactors including the dismantling or decommissioning of such power stations or reactors 1 (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).		"Decommissioning" means all steps leading to the release of a nuclear facility, other than a disposal facility, from regulatory control. These steps include the processes of decontamination and dismantling; "Nuclear facility" means a civilian facility and its associated land, buildings and equipment in which radioactive materials are produced, processed, used, handled, stored or disposed of on such a scale that consideration of safety is required; Source: Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. http://www-ns.iaea.org/conventions/waste-jointconvention.htm		The term decommissioning refers to administrative and technical actions taken to allow removal of some or all of the regulatory controls from a nuclear facility (except for a repository, which is, by definition, subject to closure and not decommissioning). These actions involve decontamination, dismantling and removal of radioactive materials, waste, components and structures. A specific decommissioning option could also be in situ disposal involving encapsulation of the reactor and subsequent restriction of access. Decommissioning	EIA is unlikely to be required for smaller new conventional power stations. Small stations using novel forms of generation should be considered carefully in line with the guidance in PPG 22 (Renewable Energy). The main considerations are likely to be the level of emissions to air, arrangements for the transport of fuel and any visual impact.		3 (a) Industrial installations for carrying gas, steam and hot water; transmission of electical energy by overhead cables	

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				may include the phased release of parts of the nuclear installations or of the site from regulatory control, before the decommissioning process for the entire installation or site is complete.Subject to national legal and regulatory requirements, a nuclear installation or its remaining parts may also be considered decommissioned if incorporated into a new or existing facility, or even if the site at which it is located is still under regulatory or other institutional control. This could apply, for example, to the decommissioning of a nuclear installation located on a multifacility site.Sources: International Atomic Energy Agency. Predisposal Management of Radioactive Waste, Including Decommissioning, Safety Standards Series No. WS-R-2, IAEA, Vienna (2000); International Atomic Energy Agency. Decommissioning of nuclear power plants and research reactors, Safety Standards Series No. WS-G-2.1, IAEA, Vienna (2000).			
3. (a) Installations for the reprocessing of irradiated nuclear fuel.				Irradiated nuclear fuel means spent nuclear fuel. The principle of final disposal is that when the spent fuel			3 (g) Installations for the processing and storage of	

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				has entirely been disposed of, for example in the bedrock, tunnels and connections onto the surface level are to be sealed and finally disposed nuclear fuel will no longer require any supervision. Sources: International Atomic Energy Agency. Predisposal Management of Radioactive Waste, Including Decommissioning, Safety Standards Series No. WS-R-2, IAEA, Vienna (2000); International Atomic Energy Agency. Decommissioning of nuclear power plants and research reactors, Safety Standards Series No. WS-G-2.1, IAEA, Vienna (2000).			radioactive waste	
(b) Installations designed: - for the production or enrichment of nuclear fuel, - for the processing of irradiated nuclear fuel or high-level radioactive waste, - for the final disposal of irradiated nuclear fuel, - solely for the final disposal of radioactive waste, - solely for the storage (planned for more than 10 years) of irradiated nuclear fuels or radioactive waste in a different site than the					In addition to the scale of the development, significant effects are likely to depend on discharges to water, emissions to air and risk of accidents. EIA is more likely to be required where it is proposed to store more than 100,000 tonnes of fuel. Smaller installations are unlikely to require EIA unless hazardous chemicals are stored.			

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production site.								
4. – Integrated works for the initial smelting of cast-iron and steel;					reg. radioactive waste: In addition to the scale of any development, significant effects are likely to depend on the extent of routine discharges of radiation to the environment. In this context EIA is unlikely to be required for installations where the processing or storage of radioactive waste is incidental to the main purpose of the development (e.g. installations at hospitals or research facilities).	suggestions to call it 'integrated steel works'; instead of cast-iron: pig-iron		Reference Document on best Available Techniques in the Cement and Lime Manufacturing industries (Dec 2001); Reference Document on best Available Techniques in the Non Ferrous Metals processing industry (Dec 2001)
Installations for the production of non-ferrous crude metals from ore, concentrates or secondary row materials by metalurgical, chemical or electrolytical processes.								
5. 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 tonnes of finished products, for friction material, with an annual production of more than		The term “asbestos” is defined in Directive 87/217/EEC as “the following silicates: crocidolite (blue asbestos), actinolite, anthophyllite, chrysotile (white asbestos), amosite (brown asbestos), tremolite”. The term “use of asbestos” is defined in Directive 87/217/EEC as “activities which involve the handling of a quantity of more than 100 kilograms of raw asbestos per year and which concern: (a) the production of raw asbestos ore excluding any process directly					5 (c) Installations for the production of asbestos and the manufacture of asbestos-products	

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50 tonnes of finished products, and for other uses of asbestos, utilization of more than 200 tonnes per year.		associated with the mining of the ore, and/or (b) the manufacturing and industrial finishing of the following products using raw asbestos: asbestos cement or asbestos-cement products, asbestos friction products, asbestos filters, asbestos textiles, asbestos paper and card, asbestos jointing, packaging and reinforcement materials, asbestos floor coverings, asbestos fillers." And in that respect "raw asbestos" is defined as "the product resulting from the primary crushing of asbestos ore".						
6. Integrated chemical installations, i.e. those installations for the manufacture on an industrial scale of substances using chemical conversion processes, in which several units are juxtaposed and are functionally linked to one another and which are:						what means "industrial scale"?	6 Chemical industry	
(i) for the production of basic organic chemicals;		Basic organic chemicals include: (a) simple hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic) (b) oxygen-containing hydrocarbons such as alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, epoxy resins (c) sulphurous hydrocarbons (d) nitrogenous hydrocarbons such as amines, amides, nitrous compounds, nitro compounds or				Expression "basic" is unclear		

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		nitrate compounds, nitriles, cyanates, isocyanates (e) phosphorus-containing hydrocarbons (f) halogenic hydrocarbons (g) organometallic compounds (h) basic plastic materials (polymers synthetic fibres and cellulose-based fibres) (i) synthetic rubbers (j) dyes and pigments (k) surface-active agents and surfactants Directive 96/61/EC, Annex I (4)(1)						
(ii) for the production of basic inorganic chemicals;		Basic inorganic chemicals include: (a) gases, such as ammonia, chlorine or hydrogen chloride, fluorine or hydrogen fluoride, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, carbonyl chloride (b) acids, such as chromic acid, hydrofluoric acid, phosphoric acid, nitric acid, hydrochloric acid, sulphuric acid, oleum, sulphurous acids (c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide (d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate (e) non-metals, metal oxides or other inorganic compounds such as calcium carbide, silicon, silicon carbide Directive 96/61/EC, Annex I (4)(2)				Expression “basic” is unclear		
(iii) for the production of phosphorous-, nitrogen- or potassium-based								

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fertilizers (simple or compound fertilizers);								
(iv) for the production of basic plant health products and of biocides;								
(v) for the production of basic pharmaceutical products using a chemical or biological process;								
(vi) for the production of explosives.								
7. (a) Construction of lines for long-distance railway traffic and of airports with a basic runway length of 2 100 m or more;	C-227/01 Commission of the European Communities v Kingdom of Spain. Judgment of 16 September 2004. A project concerned laying a supplementary 13.2 km long railway track, a 7.64 km section of which covers a new route in order to bypass the town of Benicasim, and which is a part of a 251 km long railway line, the Valencia-Tarragona line, is a project of type listed in Annex I, point 7, paragr. (a).	"aerodrome" (airport) as "a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft". Source: Convention on International Civil Aviation			For linear transport schemes, the likelihood of significant effects will generally depend on the estimated emissions, traffic, noise and vibration and degree of visual intrusion and impact on the surrounding ecology.	what does long distance mean and why only long-distance? Maybe better superior transport network; for airports rather number of flight movements or site area of more than 10 hectares for new runways or terminals	10 (c) Construction of railways and intermodal transship facilities, and of intermodal terminals 10 (d) Construction of airfields	
(b) Construction of motorways and express roads;		"Express road" means a road which complies with the definition in the European Agreement on Main International Traffic Arteries of 15			Impacts likely to be significant are traffic, noise, air quality, ecology and visual		10 (e) Construction of roads, harbours and	

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		November 1975. According to that agreement, "an express road is a road reserved for motor traffic accessible only from interchanges or controlled junctions and on which, in particular, stopping and parking are prohibited on the running carriageway(s)". According to the agreement "motorway" means a road specially designed and built for motor traffic, which does not serve properties bordering on it, and which: (i) Is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other by a dividing strip not intended for traffic or, exceptionally, by other means; (ii) Does not cross at level with any road, railway or tramway track, or footpath; and (iii) Is specially sign-posted as a motorway."			impact. EIA is more likely to be required for new motorway service areas which are proposed for previously undeveloped sites and if the proposed development would cover an area of more than five hectares.		port installations, including fishing harbours	
(c) Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road, or realigned and/or widened section of road would be 10 km or more in a continuous length.						For all linear projects: there is a problem with salami-slicing. But sometimes it is even not a salami-slicing practice, but companies due to financial restriction divide the project into smaller pieces. So perhaps the definition with some other criterion then	10 (e) Construction of roads, harbours and port installations, including fishing harbours	

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						10km could be helpful rather not only lenght – better in conjunction with connecting roads (connection points)		
8. (a) Inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1 350 tonnes;					The likelihood of significant impacts is likely to depend primarily on the potential wider impacts on the surrounding hydrology and ecology.		10 (f) Inland waterway construction, canalization and flood-relief works	
(b) Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1 350 tonnes.					not relevant for A; Primary impacts for consideration are those on hydrology, ecology, noise and increased traffic. EIA is more likely to be required if the development is on a major scale (e.g. would cover a site of more than 10 hectares). Smaller developments may also have significant effects where they include a quay or pier which would extend beyond the high water mark or would affect wider coastal processes.			
9. Waste disposal installations for the incineration, chemical treatment as defined in Annex IIA to Directive 75/442/EEC4 under heading D9, or landfill of		Hazardous wastes are those that are particularly hazardous to human health or the environment and are defined by the Council Directive 91/689/EEC, as amended by EC directive 94/31/EC. Regardless the capacity of						

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hazardous waste (i.e. waste to which Directive 91/689/EEC5 applies).		hazardous waste, an EIA is required for any form of treatment or disposal of hazardous waste.According to Council Directive 1999/31/EC on the landfill of waste treatment means the physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery. Whole set of disposal operations is defined by Annex IIA of the Council Directive 75/442/EC on Waste. However the disposal operation D9 includes physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixture which are discharged by means of any of the operations numbered D1 to D12 (e.g. evaporation, drying, calcination, etc). Incineration is defined by Directive 2000/76/EC on the incineration of waste. Incineration takes place in the incineration plants, which may or may not recover heat generation by combustion. Co-incineration is not covered by the scope of Annex I. As Annex II is not so limited then co-incineration of hazardous waste could be included there.?? Co-incineration takes place in the co-incineration plants such as cement kilns, steel or power plants whose main purpose is energy generation or the production of material products.						

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		Landfill of hazardous waste is regulated by Council directive 99/31/EC. Hazardous waste within the meaning of the Directive must be assigned to a hazardous waste landfill. Landfill means a waste disposal site for the deposit of the waste onto or into land (i.e. underground),), including: – internal waste disposal sites (i.e. landfill where a producer of waste is carrying out its own waste disposal at theplace of production), and – a permanent site (i.e. more than one year) which is used for temporary storage of waste, but excluding: – facilities where waste is unloaded in order to permit its preparation for further transport for recovery, treatment or disposal elsewhere, and – storage of waste prior to recovery or – treatment for a period less than three years as a general rule, or storage of waste prior to disposal for a period less than one year.						
10. Waste disposal installations for the incineration or chemical treatment as defined in Annex IIA to Directive 75/442/EEC under heading D9 of non-hazardous waste with a capacity exceeding 100 tonnes per day.		Non-hazardous waste means any substance or object in the categories set out in the Annex 1 to the Council Directive 75/44/EEC as amended by directive 91/156/EEC which the holder discards or intends or is required to discard. An EIA is required for any facility for the treatment or disposal of non-hazardous waste where the quantities of waste are more than			For installations (including landfill sites) for the deposit, recovery and/or disposal of household, industrial and/or commercial wastes (as defined by the Controlled Waste Regulations 1992) EIA is more likely to be required where new	discussion "disposal and recovery" possible; threshold quite low – prob. all constructions covered which insert waste; problems at every type of	11 (b) Installations for the disposal of waste	

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		100 tonnes per day. According to Council Directive 1999/31/EC on the landfill of waste treatment means the physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery. Whole set of disposal operations is defined by the Annex IIA of the Council Directive 75/442/EC on Waste. However the disposal operation D9 includes physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixture which are discharged by means of any of the operations numbered D1 to D12 (e.g. evaporation, drying, calcination, etc). Incineration of non-hazardous waste is defined by Directive 2000/76/EC on the incineration of waste. Incineration of non-hazardous waste takes place in the incineration plants, which may or may not recover heat generation by combustion			capacity is created to hold more than 50,000 tonnes per year, or to hold waste on a site of 10 hectares or more.	incineration		
11. Groundwater abstraction or artificial groundwater recharge schemes where the annual volume of water abstracted or recharged is equivalent to or exceeds 10 million cubic metres.		Directive 2000/60/EC defines “ground water” as “all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.” Directive 2000/60/EC defines “artificial water body” as “a body of surface water created by human activity.”			Impacts likely to be significant are those on hydrology and ecology. Developments of this sort can have significant effects on environments some kilometers distant. This is particularly important for wetland and other sites where the habitat and species are particularly	extremely high (equivalent to 3m³/sec annualized)	10 (l) Groundwater abstraction and artificial groundwater recharge schemes	

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					dependent on an aquatic environment. EIA is likely to be required for developments where the area of the works exceeds one hectare.			
12. (a) Works for the transfer of water resources between river basins where this transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year;					Water Framework Directive should be taken into account	100 million cubic meters/year – it deals with real transfer of water or it deals with the capacity of installation for water transfer. Sometimes the capacity can be 100 million cubic meters/year, but every year transfer only 80 million cubic meters. "multiannual" should be specified; why is transfer of piped water excluded?	10 (m) Works for the transfer of water resources between river basins	

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(b) In all other cases, works for the transfer of water resources between river basins where the multiannual average flow of the basin of abstraction exceeds 2 000 million cubic metres/year and where the amount of water transferred exceeds 5% of this flow. In both cases transfers of piped drinking water are excluded.		Directive 2000/60/EC defines “river basin” as “the area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta.						
13. Waste water treatment plants with a capacity exceeding 150 000 population equivalent as defined in Article 2 point (6) of Directive 91/271/EEC6.		According to Directive 91/271/EEC Population equivalent means the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60 g of oxygen per day.			Particular consideration should be given to the size, treatment process, pollution and nuisance potential, topography, proximity of dwellings and the potential impact of traffic movements. EIA is more likely to be required if the development would be on a substantial scale (e.g. site area of more than 10 hectares) or if it would lead to significant discharges (e.g. capacity exceeding 100,000 population equivalent).		11 (c) Waste-water treatment plants	
14. Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes/day in the case of petroleum and 500 000 m3/day in								

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the case of gas.								
15. Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres.					particular regard should be had to the potential wider impacts to the hydrology and ecology, as well as to the physical scale of the development EIA is likely to be required for any major new dam (e.g. where the construction site exceeds 20 hectares).	extremely high (prob. only spanish constructions covered)	10 (g) Dams and other installations designed to hold water or store it on a long-term basis	
16. Pipelines for the transport of gas, oil or chemicals with a diameter of more than 800 mm and a length of more than 40 km.					For underground pipelines, the major impact to be considered will generally be the disruption to the surrounding ecosystems during construction, while for overground pipelines visual impact will be a key consideration. EIA is more likely to be required for any pipeline over 5 km long.	matter of inner or outer diameter? long-distance aqueducts (including water and sewerage pipelines) should also be included	3 (b) Industrial installations for carrying gas, steam and hot water; transmission of electrical energy by overhead cables 10 (i) Oil and gas pipeline installations	
17. Installations for the intensive rearing of poultry or pigs with more than: (a) 85 000 places for broilers, 60 000 places for hens; (b) 3 000 places for production pigs (over 30 kg); or (c) 900 places for sows.				Intensive livestock farming “coincides with high animal densities” Source: Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs (adopted July 2003) Pigs: The rearing of pigs in the context of the BREF is meant to include the rearing of weaners, i.e. pigs kept separate from the sow after weaning at a live weight of around 7 kg up to	The significance or otherwise of the impacts of intensive livestock installations will often depend upon the level of odours, increased traffic and the arrangements for waste handling.		1 (e) Intensive livestock installations	Reference Document on best Available Techniques for intensive Rearing of Poultry and Pigs (July 2003)

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				approximately 25-30kg. Source: Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs (adopted July 2003) Sow: technical term for the female pig from the beginning of the first service period, or from the moment of the first gestation. This includes replacement sows (gilts), i.e. sows that replace sows in the breeding herd to maintain the required genetic material. The rearing of sows is meant to include mating, gestating and farrowing sows. Source: Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs (adopted July 2003)				
18. Industrial plants for the								
(a) production of pulp from timber or similar fibrous materials;				Pulp for papermaking may be produced from virgin fibre by chemical or mechanical means or may be produced by the re-pulping of recovered paper (RCF). In the pulping process the raw cellulose-bearing material is broken down into its individual fibres. Wood is the main raw material but straw, hemp, grass, cotton and other cellulose-bearing material can be used. Pulps produced in different ways				Reference document on Best Available Techniques in the Pulp and Paper industry (Dec 2001)

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				have different properties, which make them suited to particular products. Most pulp is produced for the purpose of subsequent manufacture of paper or paperboard. Some is destined for other uses such as thick fibreboard or products manufactured from dissolved cellulose. Source: Integrated Pollution Prevention and Control (IPPC) Reference Document on Best Available Techniques in the Pulp and Paper industry (December 2001)				
(b) production of paper and board with a production capacity exceeding 200 tonnes per day.				Paper is essentially a sheet of cellulose fibres with a number of added chemicals that affect the properties and quality of the sheet. The two terms of paper and board generally refer to the weight of the product sheet (grammage). According to the basic weight the following distinction can be made: – paper ranges up to about 150 g/m2 – a heavier sheet (between 150 and 250 g/m2) is regarded as board (paperboard) – cardboard is above 250 g/m2 Source: Integrated Pollution Prevention and Control (IPPC) Reference Document			8 (a) Industrial plants for the production of paper and board	

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				on Best Available Techniques in the Pulp and Paper industry (December 2001)				
19. Quarries and open-cast mining where the surface of the site exceeds 25 hectares, or peat extraction, where the surface of the site exceeds 150 hectares.					The likelihood of significant effects will tend to depend on the scale and duration of the works, and the likely consequent impact of noise, dust, discharges to water and visual intrusion. For clay, sand and gravel workings, quarries and peat extraction sites, EIA is more likely to be required if they would cover more than 15 hectares or involve the extraction of more than 30,000 tonnes of mineral per year.	check with other relevant regulations (for A: MinROG) unclear, why 25 ha	2 (a) Quarries, open-cast mining and peat extraction	
20. Construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km.							3 (b) Industrial installations for carrying gas, steam and hot water; transmission of electrical energy by overhead cables	
21. Installations for storage of petroleum, petrochemical, or chemical products with a capacity of 200 000 tonnes or more.								