# COMMISSION OF THE EUROPEAN COMMUNITIES

COM(93) 28 final - Vol. 13

(Le volume 13 n'existe qu'en EN)

Brussels, 2 April 1993

REPORT FROM THE COMMISSION

of the

**IMPLEMENTATION OF DIRECTIVE 85/337/EEC**

on the assessment of the effects of certain public and private projects on the environment

annexes for ALL MEMBER STATES

COMMISSION OF THE EUROPEAN COMMUNITIES

# REPORT FROM THE COMMISSION

of the

# IMPLEMENTATION OF DIRECTIVE 85/337/EEC

on the assessment of the effects of certain public and private projects on the environment

annexes for ALL MEMBER STATES

Directorate-General for Environment,
Nuclear Safety
and Civil Protection

with the assistance of

Norman Lee and Carys E. Jones, EIA Centre,
University of Manchester

November 1992

Contract No. 6610(90)8685 Et.

I

## CONTENTS

# ANNEX FOR BELGIUM

## INTRODUCTION

This annex has been prepared using a variety of sources of information, and including consultations with a wide range of participants in the EIA process in Belgium. We wish to express our sincere gratitude for all helpful comments and suggestions. In addition, the following persons have kindly acted as a central contact point. They should be acknowledged for providing relevant information and for organising valuable meetings:

Mr. Chris Van den Bilcke, legal advisor with the national Secretary of State of Environment;

Mr. J.P. Hannequart, Director General and Mrs. F. Impens, legal advisor of the Brussels Instituut voor Milieubeheer - Institut Bruxellois pour la Gestion de l'Environnement;

Ir. A. Denteneer, Director General of the Administratie voor Milieu, Natuur en Landinrichting, Ministerie van de Vlaamse Gemeenschap;

Mrs. T. Snoy, Advisor with the Minister of Environment for the Walloon region, and Mr. J. Stoquart, Secretary of the Conseil Wallon de l'Environnement.

However, we wish to emphasise that the contents of this annex are the responsibility of the author and that any views expressed are not necessarily shared by all of those consulted.

The annex is divided into two main sections containing, an analysis of the principal legal provisions to implement the EIA Directive in Belgium, and a review of the nature and extent of practical compliance with the Directive in the country. More detailed information is contained in four tables in the Appendix. The annex covers the same issues as those discussed in the other Member State annexes in this volume but, the detailed structure within its main sections is

different. Before the first of these sections, which is essential to an understanding of the EIA implementation process, there is a short description of the institutional reform process and the attempts to revise the licensing system, which is important to any understanding of EIA developments in Belgium.

**Institutional reform process**

The Laws of Institutional Reform of August 8 1980 and of August 8 1988 have created new legal entities such as the Communities and the Regions in Belgium. They have their own legislative assembly "the Council" and executive body "the Executive". The Communities and Regions are invested with legislative power equal to that of the national legislature. In the Flanders and Wallonia Region "Decrees" have the force of statute throughout the territory for which they are responsible. The Brussels-Capital Region has been given the power to issue "Ordinances". Unlike Decrees, Ordinances are subject to limited judicial review, as well as - in certain cases - limited administrative control by the national authorities.

As part of this reform process, important responsibilities with regard to the environment have been transferred to the regions:

- protection of the environment, including general and sectoral standards, respecting the standards prescribed by national authorities where no European standards exist;

- waste policy, excluding the import, transit and export of radioactive waste;

- inspection and supervision of industrial premises, with the exception of measures concerning the protection of labour. (Also excluding nuclear installations.)

As a result, agencies of the regional government have obtained a statutory role to evaluate licence applications (e.g. building permits, permits to operate etc.) and to enforce licence conditions and other regulatory provisions in the areas of environment and external safety. They also have the duty to continuously verify and inspect the adequacy of environmental controls and mitigation measures.

Related competences which have been vested in the regions include: area development planning, rural development and nature conservation, water policy, public works and public transport. The areas of competence which have not been explicitly allocated to the regions remain with the national government.

The allocation of competences is designed to be "exclusive", and there is no subordination of regional provisions with regard to national statutes. Equal standing is conferred on national laws and regional decrees. The principle that higher law prevails over lower law (e.g. "Bundesrecht bricht Landesrecht" in Germany) does therefore **not** apply to the Belgian Federal system. In theory, there should be no scope for disagreement or conflict as long as the regions stay within their own competences, and as long as the national government respects the competences vested in the regions. In practice, however, the picture is rather different. Ambiguities and limitations in the formulation of the laws of institutional reform leave substantial room for interpretation in certain areas (Boes, 1989a). The policy of one authority may conflict with that of another. Therefore, it is possible for parallel measures to be enacted at distinct levels of authority without any law being subordinate to any other. To overcome this kind of problem, a higher organ of judicial power, the Court of Arbitration, has been set up. It is entrusted with the settlement of jurisdictional conflicts between national statutes and regional decrees.

After the first and second law of institutional reform of respectively 1980 and 1988, there may be a forthcoming third phase in the institutional reform process. This may provide an opportunity to resolve remaining problems, including the **external** functions of the regions (e.g. the representation and interaction with the European Commission). Regional authorities have expressed their strong motivation and commitment towards a direct, active and constructive participation at the European level for those areas of competence which have been explicitly allocated to them.

**Revision of the licensing system**

During the 1980s, several initiatives have been developed to improve and update the existing authorization procedures. As an example, the original framework for the licence to

operate an industrial plant is provided by Title 1 of the A.R.A.B.-R.G.P.T. regulations, the so-called system of control for "dangerous, unhealthy and inconvenient plants". This regulation dates from 1946, but goes back in its original form to the Imperial Decree of October 15 1810. Since the last decade, it has been generally recognized that this existing regulation needed to be improved in a number of important areas.

Some major drawbacks with regard to the A.R.A.B.-R.G.P.T. licensing system are:

- inconsistencies and lack of specificity in the classification of installations, positive list not suitable to the modern (process) industry;

- its emphasis on individual licence conditions, specified in terms of detailed technical means rather than setting clear and comprehensive goals which have to be specified; also a substantial degree of discretion is left to individual inspectors, leading to a lack of consistency in conditions imposed on similar industries, and hence lack of stability and legal security for the involved parties.

In addition, different new licensing procedures have originated as a result of sectoral environmental laws e.g. permits for discharge into surface waters, groundwater extraction, hazardous waste collection and disposal etc. As a consequence of the sectoral approach, the following adverse effects have become apparent:

- no coordination or linkage between individual licences; lack of streamlining or harmonization of administrative authorization procedures;

- no firm commitment on the time frame within which a decision will be reached by the authorities; practical problems of projects being affected by conflicting requirements, by substantial delays or by an appalling lack of a decision;

- the specification of ill-founded or fragmentary licence conditions, whereby significant aspects are overlooked and unduly severe requirements are imposed on elements of

secondary importance.

The knowledge and insights which enter the current authorization processes have been judged to be incomplete and insufficient to allow a justified and well-balanced decision (e.g. Kreps-Heyndrikx and Van den Eede, 1989, on the authorization for dredging-related activities). Hence, the credibility, efficiency and effectiveness of the licensing system has been seriously challenged. Consequently, there have been pressures:

- to render the administrative procedures more uniform;
- to provide for a more integrated evaluation of environmental effects; and
- to strengthen the inspection and enforcement arrangements.

Within this broader framework, specific attempts have been made to accommodate and integrate the requirements of European Directives such as the EIA Directive 85/337 and the Seveso Directive 82/501. This characterises especially the approach followed in the Flanders region of Belgium.

## 1. EXTENT OF FORMAL COMPLIANCE BY BELGIUM WITH THE REQUIREMENTS OF THE DIRECTIVE

### (a) Status and overview of existing legal provisions

The first initiative, at the national level, on EIA was taken in 1977-1978. The Minister of Public Health and Environment at that time elaborated a draft proposal for a framework law on EIA. This proposal was not followed up. Instead the national government adopted an attitude of waiting. A proposal for a European Directive on EIA was under discussion at that time, and it was felt preferable to await its final version. Also, the institutional reform process started to take effect in 1980, leading to a transfer of environmental responsibilities to the regions.

In the **Flanders Region**, a policy decision was taken in 1982 to fundamentally revise the licensing system for industrial installations. It was understood that the requirements of the European Directive 82/501 on major accident hazards and Directive 85/337 on environmental impact assessment would be simultaneously addressed. This led to the adoption of the **Decree**

**on the Environmental Licence** by the Flemish Council on June 28 1985, which was subsequently published in the National Monitor on September 17 1985. This Decree contains the basic provisions to introduce EIA for industrial developments. In order to become operational, however, this Decree needed to be supplemented by one or more administrative orders. A proposal for one comprehensive Administrative Order was developed and accepted by the Flanders Executive by July 1986. It was then submitted to the Council of State for a judicial review. This review process took more than four years, and the advice by the Council of State was only produced by summer 1990. In the meantime, separate initiatives had to be taken by the Flanders government because the requirements of the EIA Directive became mandatory as of July 3 1988. First, an instruction note was issued by the Regional Minister responsible for the Environment on June 22 1988. This instruction note dealt only with the application of EIA for selected industrial projects. It did not address infrastructure projects. In addition, the legal status of the instruction was questionable. On November 3 1988 the European Commission pointed out that Belgium did not comply with the EIA Directive. Consequently, the Flanders government took the initiative to develop dedicated administrative orders introducing EIA for all project types within the jurisdiction of the region. Six **Administrative Orders** were approved by the Flemish Government on March 23 1989 and published in the National Monitor on May 17 1989. They prescribe EIA both for industrial installations and infrastructure developments. The legal basis for the industrial projects is the Decree on the Environmental Licence. For non-industrial developments the applicable EIA Orders supplement the basic Act on Town Planning and Regional Land Use of March 29 1962. The contents of these Administrative Orders are broadly consistent with the earlier proposed Administrative Order of 1986, although the former are strictly limited in scope to EIA requirements. The practical experiences in the Flanders region which are reviewed in this annex are essentially based upon these six Administrative Orders, although it has to be acknowledged that significant EIA experience had been acquired in practice well in advance of these formal legal provisions.

In **Wallonia**, EIA has been introduced by the Decree on the **Organisation of the Evaluation of Environmental Effects in the Walloon Region** of 11 September 1985 (National Monitor 24 January 1986). This Decree represents a distinct text with specific and dedicated focus upon the EIA process. It provides for a mandatory EIA for projects listed under Annex

1 of the Decree. It also includes an initial environmental evaluation process for a very broad range of licence applications, on the basis of which the project may be subjected to a full EIA procedure. Therefore, the approach in Wallonia may be characterised as a two-stage EIA system. The Court of Arbitration has annulled elements of Annex 1 of the Decree. Subdivisions 2 and 3 of this Annex contain stipulations with regard to nuclear installations and the storage of radioactive materials which remain within the exclusive power of the national government. The Decree has been supplemented by an Administrative Order of December 10 1987 (National Monitor 11 May 1988). An important discrepancy can be observed between the Decree and the Administrative Order. The latter severely restricts the number of projects subjected to the initial environmental evaluation process, as opposed to the broad range which is indicated in the Decree. However, this Order was fully withdrawn by the Council of State on June 19 1990 after an appeal by the national government. The legal basis for this annulment is given by 1) the presence of provisions with regard to nuclear installations in the Administrative Order (these competences remain within the purview of the national government), and 2) the alleged improper use of the clause "Because of urgent necessity" in the Administrative Order (to avoid the delays caused by a formal judicial review). A new **Administrative Order** was issued by the Walloon Government on July 19 1990 and published in the National Monitor on October 2 1990. This Order resembles the first one, except that stipulations with regard to nuclear projects, and restrictions on the range of the initial environmental evaluation process, have been removed. Additional transition measures are also specified to overcome the "legal vacuum" caused by the annulment of the first Administrative Order.

Around 1987 the **national government** developed a discussion document and a proposal with regard to the setting of minimal EIA requirements through national legislation. According to the first law of institutional reform of 1980, the national government retained the authority to impose environmental "norms and standards". Through a liberal interpretation of this concept of "norms and standards", it was argued that a regulatory initiative on EIA at the national level was justified. However, this viewpoint has been superseded by the second law of institutional reform of 1988, which shifted further environmental responsibilities to the regions (i.e. standard setting, and the implementation of European Environmental Directives). The national initiative also became obsolete and even counter-productive, because the necessary developments were

already well under way at the regional level.

Nevertheless, the national government still has the responsibility to implement EIA requirements for nuclear installations and the storage of radioactive materials. The licensing system for these types of premises is governed through the Law of 29 March 1958 and the Royal Order of 28 February 1963 concerning the Protection of the Population against Ionizing Radiation. These regulations need to be modified to address the requirements of the EIA Directive 85/337. So far, this has not yet taken place. It is reported that a university group (F.U.L.) has been given the assignment to develop a proposal to integrate EIA provisions within the nuclear licensing system.

Concerning the **Brussels-Capital Region**, a discussion document is available containing a "Draft Ordinance on the Evaluation of Urban Environmental Effects". This proposed legislation focuses on the urban character of the region, and stresses the integration of environmental issues with urban development and land use policy. At this moment it does not yet have force of law.

To summarize this descriptive paragraph, Table 1, in the appendix to this annex, gives a listing of EIA-relevant legislation in Belgium which is effective and operational at the time of writing (June 1991). Further developments which may be anticipated in the near future are discussed in section 1(e) below.

**(b) Basic elements and comparison of the administrative procedures in the regions**

Detailed information on the administrative EIA procedures can be found in publications edited by both the Flanders (Ministerie van de Vlaamse Gemeenschap, 1989) and the Wallonia government (Lutgen, 1990). A full description of these procedural elements is beyond the scope of this annex. It is however worthwhile to compare the two distinct EIA approaches which have developed (separately) in the Flanders and Wallonia regions in Belgium.

First, a fundamental distinction in policy context and strategy is apparent. In Wallonia, the legislation establishes a dedicated and direct focus upon EIA as such. The resulting EIA

system is superimposed on the existing environmental authorization procedures. The links to the latter remain implicit rather than direct. In Flanders, the original intention was to develop a consolidated and updated system for environmental authorizations within which the EIA process would be fully integrated. Because of the long delays in the judicial review by the Council of State in Flanders, and of the practical procedural problems and confusion encountered in Wallonia, this basic distinction in policy intention has gradually diminished over the years. In Flanders, there has been a clear shift towards developing EIA specific legislation with the objective of assuring formal compliance with the European Directive. The fundamental revision of the licensing system (although well justified) has proven to be a too ambitious goal. In Wallonia, there have been pressures for a more explicit and a more systematic integration of EIA within the existing authorization procedures.

In general terms, it can be said that the legal provisions in Flanders are essentially procedural in character. The actual content requirements are essentially a direct and literal transposition of the corresponding provisions of the Directive. The regulations in Wallonia reflect a more thorough understanding of the EIA process. The conceptual basis for EIA is better developed in the Walloon system (emphasis on environmental goals and objectives, direct attention upon the screening and scoping activity). Both regulations are formulated as framework laws whereby the regional executive government is given the power to issue further rules in respective areas (e.g. the scope and content requirements for an EIA study, the system of environmental evaluation criteria etc.).

With regard to the underlying elements of the EIA practice, the following comparison can be made:

The screening of EIA relevant activities

In Flanders, a fixed positive list uniquely determines whether a given project is subject to the EIA requirement or not. In Wallonia, a very broad range of licence applications is also subjected to an initial environmental evaluation, on the basis of which the competent authority may decide that a full EIA is necessary.

Public involvement during scoping

No formal provisions on this matter appear in the Flanders regulations. In Wallonia, a public enquiry in the scoping phase is provided, but restricted to projects initiated by a public body.

The role of experts during the preparation of an EIA study*

Both regions are concerned about the objectivity, completeness and quality of the EIA studies to be produced. An active role is specified for independent experts in both systems. In Wallonia, the independent expert bears the sole responsibility to prepare the EIA study. He has to assure the scientific rigour and objectivity of the study. The role of the developer is limited to the task of providing the necessary information. In Flanders, the preparation of the EIA is considered to be a joint effort by specialists from the developer and independent experts. A detailed procedure towards certification of these independent experts is set out in both regulations. According to the Flanders regulation, the applicants have to be Belgian citizens. This requirement does not exist in Wallonia. The current practice is that in Wallonia institutions have been certified for specific project types (e.g. process industry, energy sector, infrastructure developments etc.), whereas in Flanders individuals have been certified for specific environmental disciplines (e.g. water, soil, fauna and flora, noise etc).

The allocation of responsibilities with regard to the quality control of the EIA process

In Wallonia, an important role is given to the "Conseil Wallon de l'Environnement". This advisory body consists of representatives from universities, environmental groups, industry associations, other consultative bodies and the local authorities (Jadot, 1989a). A broad range of duties is allocated to this body. This not only includes providing advice on generic guidelines and legislative proposals for EIA-related matters. In addition, the "Conseil Wallon d'Environnement" intervenes directly within each individual EIA procedure, and is also directly involved in the certification of independent experts. This advisory body is called "the principal guardian" of the EIA system in Wallonia (Bartholomée, 1989). Next, the importance of public participation is stressed. The public is considered to be the "second guardian" of the system.

---

* EIA study = EIS as defined elsewhere in this report.

The practical duties and responsibilities of environmental officials and government inspectors are not explicitly addressed, despite the fact that the regional environmental agency plays an important role within the ("traditional") authorization processes (i.e. development of a technical advice on a licence application, including a comprehensive proposal for licence conditions to be enforced). In Flanders, the EIA instrument is more fully integrated within the underlying authorization processes. Consistently, the regional environmental administration government agency is explicitly entrusted with the follow-up and evaluation of all individual EIA reports. The observation is made that EIA is not a goal in itself, but rather a tool for the environment agency to fulfil its mandate more effectively.

**(c) Analysis of formal compliance with the E.E.C. Directive**

In order to investigate to what extent the requirements and objectives of the E.E.C. Directive have been formally met, it is necessary to evaluate first the legal status and validity of the present regulations. Indeed, a regulation should not only reflect a good understanding of the basic underlying elements of a good EIA practice, but in addition the legal formulation should be adequate to enable the objectives to be met.

A detailed legal analysis of the Flanders EIA regulations has been conducted by Boes (1989b). The following main deficiencies are reported in this study:

- The lack of clear definitions leads to room for interpretation, confusion and uncertainty. Vague expressions such as "probable important (effects)", "reasonable and relevant (alternatives)", "significant (impacts)" are frequently used in what is essentially a normative text. The difference in meaning between "magnitude" and "significance" of impacts is not appreciated. The concepts used are not sufficiently clear and require a further qualification. Environmental goals should be more clearly specified. It should be indicated whether the technological options should include the "best possible technical means" or the "best practicable and available means with proven economic feasibility". To some extent, these limitations can be related to the way the E.E.C. Directive itself has been formulated. Also, when transposing a Directive, the common approach is to stay as close as possible to the exact wording and phrasing of the original Directive.

- EIA for infrastructure developments is coupled to the building permit. However, it is not certain that some types of project will actually require a building permit (e.g. recreational facilities). Hence, there is no EIA requirement in these cases.

- The specification of infrastructural developments which are subject to EIA is often vague and leaves a wide margin for interpretation (e.g. "drastic" changes to motorways, a "complete" golf course). For infrastructure projects there are likely to be many limiting cases where it is not straightforward whether the project is subject to EIA or not.

- Specific waste-related projects are subject to both a permit to operate and a permit under the waste management regulations. The EIA Administrative Order insufficiently addresses the integration of the EIA with these two types of licensing procedures.

A corresponding legal analysis of the EIA regulations in Wallonia has been performed by Jadot (1989b). Severe drawbacks are reported such as the "manifestly incomplete" character of the dispositions, and the lack of coordination and integration between the EIA Decree and the different regulations which are implicitly modified by this Decree.

A basic remark is that the translation of EIA principles in legal obligations remains modest in certain areas. Practical examples can be found in both the Flanders and Wallonia legislation. When a developer in Flanders is not inclined to investigate alternative options, the legislation does not provide a clear stimulus or backing to force the treatment of alternatives. In Wallonia, the EIA Decree gives the Executive government the power to add plans and programmes to the EIA system. Although this appears attractive from a conceptual point of view, the legal statement does not necessarily lead to practical commitments or direct consequences. In addition, the EIA process in Wallonia is triggered by the licence application, whereas plans and programmes may not be preceded by such a formal application step.

In summary, the main deficiencies in formal compliance with the Directive are:

no transposition for nuclear-related Annex I projects;

- no EIA legislation in the Brussels region;

- insufficient provisions and co-ordination for dealing with transboundary impacts;

- incomplete transposition for Annex II projects.

There are also some deficiencies in the 'spirit' if not necessarily in the 'letter' of the transposition of the Directive. These may, in certain cases, be regarded by some as formal deficiencies:

- limitations in the legal status and clarity of the licensing system (e.g. power to issue and enforce licence conditions for public works projects, projects not requiring a building permit);

- vague formulation of the EIA legislation, limitations with regard to the binding character of the provisions (e.g. treatment of alternatives);

- interpretation problems with the concept of 'integrated chemical installations';

- lack of public involvement during scoping, no public hearing for infrastructure projects, too passive character of public participation;

- staffing problems inhibiting the government administration in adequately fulfilling its mandate.

The overall conclusion is that deficiencies in the legal formulation impose a liability upon the efficient management of the EIA process, and have implications towards the formal compliance with the European Directive. The need for improvements is however acknowledged and initiatives are being undertaken to remedy the current situation. These new developments are discussed in section 1(e) below.

**(d) Analysis of criteria and thresholds**

This section deals with the specific types of projects submitted to EIA and with the criteria and thresholds adopted in Flanders and Wallonia. The objective is to provide a detailed comparison with Annex I and Annex II of the European Directive 85/337.

With regard to the situation in Flanders, the positive lists of industrial and infrastructure projects are contained in respectively the first and the second of the 6 EIA Administrative Orders of March 23 1989 (see Table 1). They are consistent with Annex I of the Directive except that the nuclear-related projects do not appear on the list. (These remain within the authority of the national government.) Also, qualifications have been added to the concept of the "integrated chemical installations" of Annex 1. The Flanders government wished to have a clear-cut operational definition which could lead to a uniform and consistent interpretation in practice. Table 2, in the appendix to this annex, indicates the chemical installations for which an EIA is mandatory in Flanders. The chosen approach is similar to the provisions of the Dutch legislation, except that the production capacities -which serve as threshold- are at least a factor of 2 lower in Flanders. A major disadvantage of the approach is that the inorganic chemical industry is not covered in the Flanders regulation (e.g. ammonia and chlorine production, fertilizer industry, bulk production of inorganic acids and bases).

Table 3, in the appendix to this annex, provides a detailed comparison between Annex II of the European Directive and the corresponding provisions in the Flanders Administrative Orders. Several of the criteria and thresholds which are adopted have been inspired by the EIA regulation in the Netherlands. However, two prominent differences occur. The agricultural sector is well accounted for in the Flanders regulations, whereas it remains beyond the scope of EIA in the Netherlands. In the Netherlands, specific initiatives at the plan and policy level are already subject to EIA, which is not the case in Flanders.

With regard to Wallonia, the EIA Decree of 11 September 1985 includes an Annex which duplicates Annex I of the European Directive. It is understood however that the nuclear-related projects no longer have legal validity. The Administrative Order of 19 July 1990 also stipulates additional project types for which an EIA is mandatory. Table 4, in the appendix to this annex, compares these with Annex II of the European Directive.

However, the basic characteristic of the approach in Wallonia is that each licence application (for e.g. a building permit or a permit to operate) is accompanied by an initial environmental evaluation notice. On the basis of this announcement, the competent authority (i.e. at city or provincial level) may then decide to require a full EIA. However, this original idea is in the process of being replaced by a more "traditional" approach, which also better resembles the project types indicated in the European Directive on EIA.

(e) Forthcoming developments

In this section, we review some ongoing developments which may lead to additions and/or modifications to EIA legislation in Belgium. Table 5, in the appendix to this annex, summarises these initiatives.

In **Flanders**, a new Administrative Order ("VLAREM") dealing with the environmental licence system is expected to become effective by 1 September 1991. Some of the provisions relating to the permitting procedure have an influence upon EIA: Article 18 of VLAREM stipulates that a public hearing needs to be organised for every project which has been subjected to EIA. The employer also has to send the EIA report to the safety committee of his own company (art. 6 § 2). In addition, the safety committees of neighbouring industrial establishments need to be notified if these are located within a 100m radius of the proposed development (art. 17 § 3 sect. 2). The VLAREM Administrative Order also sets out the substantive requirements for advice and decisions on the licence applications. It is surprising, however, that there is **no** explicit requirement for this decision to be based upon the EIA, although this condition can be considered as implicit under the general rule of "duty of care" of government actions.

The **Flanders** Environment Minister also proposed a Draft EIA Decree in the spring of 1989 (i.e. the same time as the Administrative Orders of March 23 1989 were worked out). This proposal contains little substantial improvements relative to the existing Administrative Orders, but it would provide a more solid legal basis for implementing the European Directive. Article 25 of this proposed legislation addresses the organisation of public consultation and article 26 deals explicitly with transboundary effects. It would require a public hearing for **all** EIA

projects; that is not only for industrial developments, but also for infrastructure works. Two advisory bodies have produced a comprehensive review of this Draft EIA Decree: Sociaal Economische Raad voor Vlaanderen ("SERV") and Vlaamse Raad voor het Leefmilieu ("VLARALE"). The SERV consists of representatives from employer federations and the unions. Their main remark (SERV, 1989) is that EIA should only be required for new projects, and **not** for the renewal of permits for existing installations. In the latter case, a more restricted "environmental report" should be sufficient. The VLARALE has a statutory role to advise the Minister on environmental policy matters. It consists of a wide representation from regional, provincial and local authorities, universities and research institutions, environmental groups, employers and unions. The main concern expressed here (VLARALE, 1990) is the quality control of the EIA process. The VLARALE argues that there should be more explicit provisions in the Decree relating to the content requirements of the EIA report (i.e. treatment of alternatives, description of the existing environment, etc.) and to the review and evaluation of the resulting EIAs. The VLARALE also advises the use of "Environmental Reports". Such a report would be more restrictive in scope and depth than an EIA, and would be selectively applied for:

- projects which may be overlooked in a positive list, such as relatively small activities with potential for serious environmental effects (e.g. within the micro-electronics industry);

- existing activities where the environmental impacts are such that a 'clean-up' effort is necessary. In practice, the priority-setting and design of mitigation measures is usually not straightforward. The Environmental Report would help to guide the development of a defensible concept of mitigating measures with realistic deadlines set for implementation.

In fact, this VLARALE proposal already corresponds to the practice which has been adopted in Flanders between 1986 and 1990. It would however provide a formal legal basis for this. The above advice was produced during 1989. Since then, there has **not** been a follow-up to this proposed Draft Decree.

Finally, it is worth mentioning that an inter-university commission with high-level legal experts has been set up in **Flanders** to develop proposals towards an updated and integrated environmental framework legislation (Bocken, 1991). The objective is to consolidate and streamline environmental provisions and procedures, and to improve the legal standing and enforcement of environmental legislation. Many people feel that this activity forms the best prospect towards a more defensible and effective regulatory system in the field of the environment. The proposals from this commission may lead to a better recognition of EIA as a basic prevention tool. There are expectations that EIA principles would be introduced at a higher level in this framework legislation, rather than as a mere add-on to the licensing procedures.

In **Wallonia**, a proposal for a new Administrative Order was agreed by the Walloon Government in June 1991. It was submitted to the Council of State for legal review, and is expected to become operational in the autumn of 1991. This new development is more comprehensive than the existing Administrative Order. In the annexes, a common reporting format is set out for the initial environmental evaluation. There is also an explicit list of projects for which EIA is mandatory. This resembles more closely the requirements of the European Directive. Article 40 of the proposed Order deals with transboundary effects. The development of this proposal has been described by Sancy (1990).

With regard to the **Brussels-Capital Region**, a draft Ordinance is available from the Brussels Instituut voor Milieubeheer - Institut Bruxellois pour la Gestion de l'Environnement ("B.I.M.-I.B.G.E."). Also, supporting discussion documents have been produced (B.I.M., 1989; Hannequart, 1991). This Draft Ordinance has been submitted to the Council of State for legal review. A central issue is the integration of urban development and environmental concerns. The need is also acknowledged to conduct environmental evaluations at the higher level of land use planning. The proposal includes mandatory EIA for a list of projects, which includes those in Annex I of the European Directive. In addition, a study of intermediate scope and depth is foreseen for a second list including those in Annex II of the Directive. A core role in the follow-up and evaluation of EIA is provided for the B.I.M.-I.B.G.E.

Finally, at the **national** level, a proposal is still expected to implement the EIA Directive for nuclear-related activities. The anticipated EIA law at the national level will **not** address non-nuclear impacts, because the responsibility for these matters lies essentially with the regions. The institutional reform makes the required implementation of Directive 85/337 for **Annex I** nuclear-related activities rather troublesome. A cooperation agreement between the national government and the regions is being suggested as a possible mechanism to overcome these problems.

Formal compliance with the requirements of the Directive has undoubtedly taken a considerable time in Belgium. In addition to the delaying factors observable in other Member States, it is undoubtedly the case that the process of institutional reform and attempts to rationalise and co-ordinate authorization procedures have been major contributory factors in this country.

## 2. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

### (a) Overview of EIA reports produced

The 1989 and 1990 annual reports by the "Bestuur voor Leefmilieu" (Bestuur voor Leefmilieu, 1989; 1990) contain a full list of the EIAs completed in the Flanders region under the requirements of the Executive Orders of March 23 1989. For large industrial developments, EIAs were already conducted on an informal "goodwill" basis since 1986. The number of studies in this earlier trial period amounted to about 20 each year. The practical experiences during this informal phase have been reviewed by De Wel (1989). In the Walloon region, an inventory of EIAs produced under the Decree of 11 September 1985 has been prepared by Snoy.

In **Flanders**, 49 EIAs have been completed between March 23 1989 and the end of 1990. When these studies are compared against the annexes of the European Directive, the following observations can be made:

- The number of Annex I project studies undertaken was 18 comprising: 7 studies for chemical installations, 5 for waste-treatment installations, 3 large infrastructure projects

(i.e. within category 7 of Annex I), 2 refinery extensions and 1 thermal power station;

- Annex II projects accounted for 28 EIA studies. The dominant contributor here was agriculture (20 projects), consisting of 15 studies for poultry-rearing installations, 4 land restructuring projects and 1 water management project. Additionally, 6 EIAs have been prepared for the installation of pipelines and 2 for quarries;

- Finally, 3 recreational and tourist development projects have been subjected to EIA, (this project type is not directly mentioned in the European Directive).

In **Wallonia**, 39 EIA's have been produced since May 11 1988 (Snoy).

- 23 EIAs have been produced for Annex I projects comprising: 9 for industrial chemical installations, 10 for disposal and treatment of waste, and 1 thermal power plant. Also, 2 motorway developments and 1 railway traffic project (i.e. T.G.V.) have been subjected to EIA;

- Annex II projects account for 16 EIAs. There have been 13 studies for racing tracks for cars and motor cycles; 1 for a holiday village and 2 for other industrial projects.

**(b) <u>External experts involved in EIA preparation</u>**

In **Flanders**, 161 individual experts, out of 299 applications, have been certified by the end of 1990 for EIA preparation. This certification holds for one or more environmental disciplines. The number of experts in each of the 9 specified disciplines is as follows:

man: 16; fauna and flora: 21; soil: 59; water: 79; air: 36; light, heat and radiation: 7; noise and vibrations: 17; climate: 12; monuments and landscape: 23.

Most experts are recognized for either one or two disciplines. All hold a basic degree in either sciences (50%) or engineering (50%).

In **Wallonia**, 21 consulting firms or research institutions are accredited to perform EIA studies for specified project types. Five basic areas of expertise are identified:

industry: 8; waste disposal: 11; urban development and land use: 17; agriculture: 8; mines and quarries: 11.

On average, a consulting firm covers between two and three project types. Universities are well represented, followed by architectural and engineering design companies.

(c) Involvement of government agencies

In **Flanders**, the legislation of March 23 1989 imposes specific duties upon the "Bestuur voor Leefmilieu", which is the environmental agency within the regional administration. This agency intervenes at several occasions within the EIA procedure. First, the study team who is going to prepare the EIA has to be accepted by this authority. Second, when the EIA study is drafted, it is submitted to the "Bestuur voor Leefmilieu" for review. This review is focused upon the completeness and quality of the report and upon its compliance with the EIA legislation. If the EIA report is considered acceptable, an "attestation of conformity" is issued by the "Bestuur voor Leefmilieu". This constitutes a necessary condition for the formal start of the licensing procedure and the public enquiry. For industrial projects, the "Bestuur voor Leefmilieu" also intervenes at the end of the licensing procedure in order to produce final advice to the (political) decision-making authority. This advice contains a judgement on the acceptability of the project together with a proposed concept of licence conditions to be enforced (e.g. mitigating measures, monitoring requirements). For infrastructure related projects, this final advice is produced by other agencies within the Flanders government. An organisational reform during 1991 will modify the name of the "Bestuur voor Leefmilieu" into "Administratie voor Milieu, Natuur en Landinrichting (AMINAL)".

In **Wallonia,** the EIA legislation does not specifically address the role of regional environmental authorities. On the one hand, the existing responsibilities relating to the licensing system remain unchanged. On the other hand, the majority of direct EIA-related tasks is assigned to a new advisory body: the "Conseil Wallon de l'Environnement (CWE)". The names and

affiliations of the current members can be found in Jadot (1989a). The "Conseil Wallon de l'Environnement" consists of two main sections. The first deals with the follow-up of specific EIAs. The second is concerned with the preparation of an annual report on the "State of the Environment in Wallonia". The C.W.E. also plays an important consultative role. It is involved in the accreditation process of consulting firms. Its advice is solicited when modifications or additions to the EIA legislation are proposed. Finally, it has a role to coordinate and promote the development of EIA guidance and recommendations.

With regard to the **Brussels Capital Region**, an important role in EIA is anticipated for the recently established "Institut Bruxellois pour la Gestion de l'Environnement (IBGE) - Brussels Instituut voor Milieubeheer (BIM)".

**(d) Appraisal of EIA practice by participants in the process**

When discussing practical experience, it is evident that widely varying opinions are obtained even from within a same group of participants to the EIA process.

The legal implementation of EIA has evolved along different roads in Wallonia and Flanders. Both approaches have rational, understandable and defensible attributes, but they are not consistent with each other, and so far there has been little if any "cross-fertilization" among the regions. Notwithstanding these differences in formal implementation, it is important to underline that the practical "field" experiences exhibit important similarities, and that the expressed concerns and difficulties are in fact common to the two regions. Therefore, a clear-cut distinction along the regions is not justified when discussing EIA practice.

The most profound concern centres on the quality assurance of the EIA process. How can we prevent EIA being based on self-serving, biased, inaccurate and inadequate analysis? In principle, such risks can be mitigated by:

- clear and explicit requirements for the content of an EIA, imposed by legislation or by guidelines and recommendations;

- the professional expertise and commitment of the EIA practitioners; and provision for independent input during the preparation of an EIA;

- procedural safeguards, such as evaluation by the authorities and public participation. This evaluation effort should be rigorous and systematic, such that a failure to generate the best available information would be counterproductive to the credibility of the developer, and would seriously prejudice his application.

We will now review the practical situation in Belgium in the light of these three quality requirements.

EIA content requirements

With regard to content requirements for an EIA, there is broad agreement that the formulation in the legislation remains unduly vague. On the basis of this, developers might be inclined to believe that only a minimal analysis would be adequate. In Flanders, the legislation provides little backing to require the treatment of alternatives. It does not empower the administration to enforce the analysis of well-founded alternatives. In the 1990 annual report by the "Bestuur voor Leefmilieu" (Bestuur voor Leefmilieu, 1990), this problem is stated as one of the major drawbacks of the existing legislation. Also in Wallonia, it is argued that there exists a discrepancy between the original proposals for content requirements and the final provisions as adopted in the Decree (Bartholomée, 1989). The former had a stronger emphasis on the treatment of alternatives, and also a wider scope.

In practice, a creative search for alternatives may lead to serious bottlenecks and/or challenges. Especially for infrastructure works, the current environmental evaluation occurs too **late** in the planning process. Individual projects are not proposed in a vacuum, but fit into a broader planning context. This broader setting may determine the final outcome to such an extent that room for creativity in the project phase is strongly reduced. When environmental considerations would be ignored at the higher planning level, it may well be impractical to correct this at the project level, because of the limited degrees of freedom left at this stage. Therefore, there exists a distinct need for EIA at a higher and more strategic planning level. It

is justified to consider a two-stage approach, with a broader and more strategic study early on in the planning process, and a study of higher resolution and more selective focus to individual projects later on.

Some guidance has been issued to help in improving the situation. For example, in Flanders, the Department of Infrastructure has issued internal guidelines relating to the screening of EIA-relevant infrastructure projects (Hendrickx). This guidance is designed to result in a clear and consistent interpretation of the regulation. In addition, the same department is in the process of developing internal EIA manuals for specific activities (e.g. dredging operations). Also, the Flemish association of environmental groups B.B.L. has issued a report on EIA (B.B.L., 1989) in order to enhance the ability of individuals or groups to understand and participate in EIA activities.

In the spring of 1990, a comprehensive research project was jointly proposed by a group of 10 professors from four universities in Flanders (Hendrickx). This collaborative project is aimed at the development of a set of guidelines to encourage more sound and consistent EIA practice. Two main objectives are identified:

- to provide recommendations to practitioners on the scope and depth of EIA, the appropriate use of methodologies, and the access to available information resources;

- to guide the quality control activities and evaluation efforts by authorities, and to help them discern incomplete, misleading or inaccurate information.

The Environment Minister has not yet authorised the start of this research project. Several people find this surprising, because the environmental policy plan (Kelchtermans, 1990) of the same Minister emphasizes the importance of EIA as a basic prevention tool.

In practice, the "Bestuur voor Leefmilieu" makes extensive practical use of the project-specific EIA guidelines which are developed by the EIA Commission in the Netherlands. Also, EIA practitioners have been consulting the well-known EIA handbook series published by the

Environment Ministry VROM in the Netherlands (VROM, 1987).

In summary, it is fair to conclude that there is a real need for the publication of guidance on generally accepted minimum requirements for EIA studies. It is also necessary to actively distribute such guidelines to ensure uniform and consistent implementation.

Professional quality, objectivity and independence of EIA practitioners

Both Flanders and Wallonia stress the importance of scientific soundness, independence and objectivity in the preparation of an EIA. As a means to accomplish this, an explicit role is provided for external, accredited experts or institutions. The basic question is whether the consultancy profession can meet these demanding goals and aspirations. Many people express their substantial doubt on this. They argue that the environmental consultancy sector in Belgium is still relatively young, immature and small-scale. In addition, increased environmental concern has triggered the development of many new sub-standard firms, whose lack of expertise threatens the reputation and credibility of the entire sector. Also, doubt is expressed over the alleged "independence" of experts. Some consulting firms are spin-off activities from larger industrial holdings and/or have distinct political affiliations. In any case, the consultant inevitably remains financially dependent upon the developer (Verboven, 1990). The ultimate consideration is the amount of resources and funding a developer is prepared to invest to produce an EIA. A consultant cannot go beyond these imposed limits. In practice, it is observed that many experts have to work under extreme time and resource constraints. The bottom line is that many people remain doubtful whether quality EIAs can be produced at all within these broader settings.

How have developers themselves reacted to the involvement of external EIA experts? Industry, especially, has argued that there is not necessarily a need to involve them in the first place. Their "official" reason is that better qualified and more experienced staff are already available within the organisation. "If a company does not have sufficient in-house expertise to deal with environmental hazards, they should not be in business!" However, other underlying considerations should be recognized. An EIA produced by a joint group of internal and external experts may be more difficult to manage. An external expert may raise questions about design practices or procedures which are obvious and trivial to in-house staff. Industry feels that they

are actually sponsoring the development of environmental expertise within consulting firms (Caestecker, 1989). In addition, the EIA is usually prepared several levels below the manager and must pass through a series of internal reviews. This review can filter out information or positions which might lead to a discussion, or which could contradict current policies or practices within that organisation. This filtering process may become more difficult when external experts are involved in the evaluation process and have to co-sign the final EIA report.

The EIA practitioners themselves acknowledge that they are in a difficult and unenviable position. It is not at all straightforward to balance the expectations from authorities and public to produce quality EIAs, and the requirements from developers to limit costs and delays. The EIA experts have to work in a competitive environment. Their basic concern is to convince the developer of the workload and investment needed to produce a good quality EIA. They are frightened by the potential for "quick and dirty" EIAs to be accepted by the authorities. This would create a dangerous precedent. It would lead to a situation where an expert with a more thorough approach would simply get out of business.

Experts suggest two solutions to remedy this threat. First, clear guidelines on the EIA content requirements should be issued. Second, the quality control by authorities should be strengthened. Most EIA practitioners acknowledge that the government officials involved in EIA are committed and motivated to fulfil their mandate. The administration has also repeatedly stressed the need for quality within the EIA process. And there may well be a great deal of consensus among authorities and experts with regard to the scope and extent of an EIA study. However, the practical effectiveness of this government support is questioned on two grounds: so far, EIA meetings have been on a case-by-case or informal basis. The mere existence of a consensus in a previous specific case - e.g. on the usefulness of a (foreign) guideline from the Dutch EIA Commission - may not be enough to convince another developer. Second, shortage of staff on the government side prevent adequate follow-up and evaluation of EIAs by the authorities.

Procedural safeguards: EIA evaluation and public participation

The evaluation process can be divided in two main parts. First, an "objective" assessment

of the scientific soundness and technical competence of the EIA. This condition needs to be fulfilled before the EIA can be validly used in the "subjective" appraisal of the significance of the impacts and of the implications of various decision options.

In **Wallonia**, the EIA's are reviewed by a consultative body, the Conseil Wallon de l'Environnement (see 2(c)). The C.W.E. has been criticized for issuing political statements and for not reaching consensus on crucial matters. This is not surprising though in view of the composition of this consultative body (i.e. representing different interest groups) and of its mandate. It is unrealistic to expect an EIA to end all controversy. There is nevertheless a viewpoint that the C.W.E. has not adequately dealt with the preceding "objective" parts of its evaluation effort, and has instead jumped directly to the subjective (and political) appraisal. It should however be pointed out that the C.W.E. has only been given very limited resources to fulfil its mandate. Members of the C.W.E. have been reviewing EIA reports on a voluntary basis and as an add-on to their normal jobs. In Wallonia, there are pressures to strengthen the role of the regional environment administration in conducting EIA evaluation tasks.

In **Flanders**, EIAs are reviewed by the regional administration (see 2(c)). The essentials of their evaluation strategy has been described by Schreurs (1990). This contribution also includes a consideration of general review criteria. Contrary to the developments in Wallonia, some propose to withdraw the evaluation task from the Flemish administration, and to allocate it to a new dedicated body.

The adequate evaluation of EIA by the authorities requires organisational resources of several kinds (e.g. motivated and skilled staff, access to data resources and simulation tools, capacity to conduct specialised analyses, etc.). There is almost universal agreement that this requirement has not received sufficient political attention. Sancy (1990) calls the situation in Wallonia appalling in this respect. In the foreword to the 1989 annual report of the "Bestuur voor Leefmilieu", the leading official of this administration expresses his plain outrage (Bestuur voor Leefmilieu, 1989). The Flanders Environment Minister himself admits in his policy plan (Kelchtermans, 1990) that the ratio of staff to workload in implementing European Directives is a factor of four to ten lower in Flanders than in neighbouring EEC countries.

The organisation of public participation is an essential element within an adequate EIA process. Snoy describes the practical experiences in Wallonia in this regard. Public hearings are perceived as a difficult exercise. In case of controversial projects, it may lead to "a dialogue between the deaf". Also, EIA practitioners have invested too little effort in the non technical summary of the EIA. Their basic aim has often been to make the EIA defensible in the eyes of other experts, rather than to produce a widely accessible report. In Flanders, public participation has been more "passive". The EIA may only be consulted by interested parties during a limited time within the existing licensing procedure. This public enquiry takes place after the "attestation of conformity" has been issued by the administration. There is no public involvement during EIA scoping, and the obligation to organise a public hearing will only become effective for industrial projects when the new "VLAREM" licensing regulations will become operational (Devuyst and Hens, 1990).

An underlying element is that the administrative culture in Belgium has been one of official discretion and reticence on the part of government officials. They are traditionally very cautious when asked specific questions.

Environmental groups often perceive the current EIA practice as a matter of negotiation among technicians with little interference from outside. They are reluctant to accept EIA findings because they believe they were excluded from the actual EIA process. Frustrating experiences are reported because their views are only solicited at a moment when the decision is already in an advanced stage, when the developer considers his proposal as final. Above all, environmental groups emphasize the need for transparency of the EIA process.

Developers are concerned that open procedures might be abused to delay decisions. They view with despair the potential ability of opposing groups to raise a plethora of issues of infinitesimal relevance which nonetheless they may be obliged to check out through exhaustive analysis. Developers fear that politicians might use EIA as an alibi to avoid their taking responsibility. They are concerned that their project might become negatively affected by policy disagreements on the appropriate approach or by the lack of an explicit vision.

From actual experiences, the following practical lessons on public participation can be drawn:

- People are more interested in matters of trust, credibility, and fairness than in the technical details of impact predictions and mitigation options. They focus on the legitimacy of the process by which EIA contents are determined. If they believe that this process is flawed (i.e. because of the weakness of the legal provisions, the lack of content guidelines, the lack of independence of EIA authors, etc.), they are likely to doubt the EIA findings even if the analysis is in fact technically competent and scientifically sound.

- Participants in the EIA process may not know or necessarily accept the legal and other practical boundaries that constrain the decision following a project related EIA. For instance, the legal standing and degree of fragmentation of the licensing system determine the kind of mitigating measures which may actually be imposed. Previous decisions at a higher planning or policy level, such as land use planning, have a distinct influence on the outcome. It is, therefore, increasingly realised that an EIA at project level may preclude solutions in the broader interest, and that there is justification to extend the EIA process to a higher planning level.

- A discrepancy may be observed in the focus of concern between authorities and the public. Because of their legal mandate and technical expertise, the former tend to focus on short term and direct issues, e.g. on the technical performance characteristics of a hazardous waste treatment process. The public attempts to widen the scope and raise more fundamental and long term issues such as, for example, the emphasis given to waste prevention policy. They wish to discuss the underlying value systems on which decisions are based, and argue that as long as this discussion remains below the surface, confusion and ambiguity are likely to remain.

- EIA does not always result in the responses a particular source might wish, nor does it always lead to consensus. People do not all share common interests and values, and therefore a better understanding will not necessarily lead them all to the same conclusion.

- From the perspective of authorities, credibility is gained only through a sustained effort to be responsive to audience concerns and to be accurate, open and honest in disclosing essential information.

- Improvements in public participation will not fully resolve environmental management problems and end controversy (although poor public participation can create such problems). Even when everything has been done to ensure the integrity of EIA, public scepticism about motives and honesty may persist. Scepticism, antagonism, and hostility will never be fully removed.

**(e) Practical merits and value of EIA**

The previous paragraphs have indicated weaknesses and unsatisfactory elements in EIA provisions and practice. There is, unfortunately, no shortcut to improving EIA efforts. It is a dynamic process. The improvements in performance that are needed can only come incrementally and only from assiduous attention to several aspects.

The main benefit from EIA practice has been that environmental considerations are being addressed earlier in the design process and also on a more systematic basis. It has led to increased informal contacts between developers and authorities. Within industry, EIA has contributed to greater professionalism with regard to environmental and safety issues, and also to a better recognition by management of the importance of these responsibilities. In the longer term, EIA is recognized as a guiding force towards improved environmental standards and preventive measures. In addition, it has brought about pressures for a more environmentally sound land use planning system, and for a consolidation of fragmented and cumbersome authorization procedures.

Related actions, which have been initiated, are influenced by the spirit of the EIA process. The Infrastructure Department of the Flanders government is developing a project manual, which is designed to better guide and justify project proposals from the earliest stages of planning (Hendrickx). The manual acknowledges that the real process of environmental assessment must commence well before the formal EIA process. The Vice-President of the

Flanders Government has supported the integration of ecological criteria within his industrial development policies (De Batselier, 1991). Related developments may also influence EIA practice. The Flanders Minister responsible for the civil service has challenged the rigid duty of secrecy imposed on civil servants, and has triggered a discussion on the concept of a more open approach involving a selective right to speak (Vandenbossche, 1990). Also, unions have acquired interest in the EIA process. Two unions have each edited a manual to assist their delegates in the follow-up of environmental affairs within company and health and safety committees (A.C.V., 1990; A.B.V.V., 1991).

Universities have undertaken research and training initiatives on EIA. The majority of these efforts have been directed towards the scientific, methodological aspects of EIA (Schreurs and De Wel, 1991). A broader view however would involve attention to the integrated EIA process. Such a wider research strategy would not only consider the quality of the EIA report as such, but also address its usefulness in support of the goals of environmental policy. This includes the use of the EIA report in the actual decision making process, together with its linkage with the follow-up inspection and monitoring activities. Such a research program was commissioned by the Vice-President of the Flanders government in the autumn of 1990. It is being carried out by an interdisciplinary group of experts from the research centre V.I.T.O., together with the Free University of Brussels. This ambitious project consists of three phases:

- an evaluation of the administrative EIA procedures;

- content requirements and methodological aspects;

- follow-up of case studies; evaluation of the effectiveness of EIA as an instrument of environmental policy.

The first phase of this research project was completed in March 1991. However, reports have not yet been officially released for distribution. The main reason for this reticence is that such a wider evaluation effort inevitably entails close connections with politically sensitive issues. Controversies about EIA practice turn out to be basic (politically sensitive) debates about the

limits of governmental accountability, legitimacy and authority. It directly invokes questions on credibility, such as what is the real weight attached to environmental policy? How much staffing and resources is one willing to make available to enforce environmental goals?, etc.

## REFERENCES


A.B.V.V. (1991) Milieuhandboek voor vakbondsvertegenwoordigers. Brussel.

A.C.V. (1990) Milieudossier scheikundige nijverheid. Brussel.

B.I.M. (1989) Ronde tafel over het leefmilieu in Brussel. B.I.M. Rapporten no. 1, Brussel.

Bartholomée, V. (1989). Un instrument juridique de prévention des atteintes à l'environnement: le système d'évaluation des incidences en Région wallonne. Aménagement 2 p.42

Bestuur voor Leefmilieu (1989, 1990) Jaarverslag 1989 en 1990. Ministerie van de Vlaamse Gemeenschap, Brussel.

Bocken, H. (1991) Naar een algemeen kaderdecreet inzake milieuhygiëne? De werkzaamheden van de Interuniversitaire Commissie tot Herziening van het Milieurecht in het Vlaamse Gewest. Voordrachttekst studiedag milieu-management Flanders Technology 1991. Gent, 24 april 1991.

Boes, M. (1989a) Länderbericht Belgien. Umweltverträglichkeitsprüfung in der Europäischen Gemeinschaft. R. Coenen, J. Jörissen, Ed. Beiträge zur Umweltgestaltung Band A 115. Erich Schmidt Verlag, Berlin.
(A related contribution in English has also been published by the same author: Boes, M. (1990) Environmental Impact Statements in Belgium. Northwestern Journal of International Law & Business 10: 522.)

Boes, M. (1989b) Milieu-effectrapportering. Juridische aspecten. Voordrachttekst studiedag Milieu-effectrapportering in Vlaanderen. De besluiten van de Vlaamse Executieve van 23 maart. K.U. Leuven, Leuven, 27 september 1989.

Bond Beter Leefmilieu (B.B.L.) (1989) Milieu-effectrapportering in Vlaanderen. B.B.L. Cahier no. 1., Brussel.

Caestecker, E.F. (1989) Evaluatie milieu-risico's. Ervaringen met "MER/VR". Studiedag milieu-management. Gent, 25 oktober 1989.

De Batselier, N. (1991) Technology policy in Flanders. V.U.B. Magazine Jaargang 6, nr.20, p.15.

De Wel, H. (1989) Wetgeving en ervaringen terzake van milieu-effectrapportage in het Vlaamse Gewest. in Milieurecht Recente Ontwikkelingen. Deel II. L. Lavrijsen, Ed. Story-Scientia, Brussel.

Devuyst, D. and Hens, L. (1990) Environmental impact assessment in Belgium : an overview. Paper submitted for publication to The Environmental Professional.

Hannequart, J.P. (1991) Incidences sur l'Environnement. Les projets de réglementation en Région Bruxelloise. Document 91.05.17/JPH/NM. B.M.M.-I.B.G.E., Brussel.
(A corresponding document in Dutch is also available: Gegevens voor een Brusselse reglementering inzake milieu-effectbeoordeling. B.I.M.-I.B.G.E., Brussel)

Hendrickx, T. Personal communication.

Jadot, B. (1989a) L'évaluation des incidences sur l'environnement en Région wallonne. Samson Environnement & Gestion no. 1., 9 août.

Jadot, B. (1989b) La réglementation de l'évaluation des incidences sur l'environnement, spécialement au regard du décret de la Région wallonne du 11 septembre 1985. publié dans Droit de l'environnement. Développements récents. Volume II. L. Lavrijsen, Editor E.Story-Scientia, Bruxelles.

Kelchtermans, T. (1990) Milieubeleidsplan en natuurontwikkelingsplan voor Vlaanderen. Voorstellen voor 1990-1995 (MINA-plan), Brussel.

Kreps-Heyndrikx, Y. and Van den Eede, E. (1989) De MEP-procedure. Tijdschrift Water nr. 47 juli/augustus p.127

Lutgen, G. (1990) Application de la législation sur l'évaluation des incidences sur l'environnement de projets publics ou privés. Circulaire aux députations permanentes et aux communes, 2 octobre. Ministre de l'agriculture, de l'environnement et du logement. Bruxelles.

Ministerie van de Vlaamse Gemeenschap, Brussel (1989) Milieu-effectrapportering in het Vlaamse Gewest. Document D/1989/3241/25.

Sancy, M. (1990) Les études d'impact en Belgique. Le cas de la Wallonie. Environnement & Société no. 5: 27. Fondation Universitaire Luxembourgeoise, Arlon, 1990.

Schreurs, P. (1990) Milieu-effectrapportering : praktische ervaringen van het Bestuur voor Leefmilieu. Voordrachttekst in het kader van de Studiedag Milieu-effectrapportering bij het Ministerie van Openbare Werken. Brussel, 17 oktober 1990.

Schreurs, P. and De Wel, H. (1991) EIA training and research in Belgium. in Environmental impact assessment training and research in the European Communities. C. Wood & N. Lee, Editors. Occasional Paper no. 27. University of Manchester, Manchester.

Snoy, T. Les caractéristiques de la législation sur les études d'impact en Région wallonne.

Exposé au Séminaire "Entreprise et Environnement" de l'Union Wallonne des Entreprises.

Sociaal Economische Raad van Vlaanderen (SERV) (1989) Advies inzake het voorontwerp van decreet houdende organisatie van de milieu - effectbeoordeling van bepaalde openbare en particuliere projecten. Brussel, 21 juni 1989.

Vandenbossche, L. (1990) Van zwijgplicht naar openbaarheid van bestuur. Is zwijgen altijd beter dan goud? Vriendenboek Secretaris Generaal Etienne De Ryck. Lannoo, Tielt, 1990.

Verboven, J. (1990) Milieueffect-beoordeling. Lessencyclus Milieurecht voor niet-juristen - Milieu-sanering voor niet-technologen. R.U. Gent, Gent, 11 mei.

Vlaamse Raad voor het Leefmilieu (VLARALE) (1990) Jaarverslag 1989. Ministerie van de Vlaamse Gemeenschap, Brussel.

VROM (1987) Handleiding milieu-effectrapportage. Koninklijke Vermande, Lelystad, 1987. (en ondersteunende handboekenreeks effectvoorspelling). Ministerie VROM, Nederland.

## APPENDIX

### Table 1: List of effective and operational EIA regulations in Belgium (status: march 1991)

### 1. Flanders Region

#### 1.1. Decree

- Decreet betreffende de milieuvergunning van 28 juni 1985. (Belgisch Staatsblad 17 september 1985)

#### 1.2. Administrative Orders

- Besluit van de Vlaamse Executieve van 23 maart 1989 houdende organisatie van de milieu-effectbeoordeling van bepaalde categorieën van hinderlijke inrichtingen. (Belgisch Staatsblad 17 mei 1989)

- Besluit van de Vlaamse Executieve van 23 maart 1989 houdende bepaling voor het Vlaamse Gewest van de categorieën van werken en handelingen, andere dan hinderlijke inrichtingen, waarvoor een milieu-effectrapport is vereist voor de volledigheid van de aanvraag om bouwvergunning. (Belgisch Staatsblad 17 mei 1989)

- Besluit van de Vlaamse Executieve van 23 maart 1989 tot aanvulling voor het Vlaamse Gewest van het ministerieel besluit van 6 februari 1971 tot vaststelling van de samenstelling van het dossier van de aanvraag om bouwvergunning. (Belgisch Staatsblad 17 mei 1989)

- Besluit van de Vlaamse Executieve van 23 maart 1989 tot aanvulling voor het Vlaamse Gewest van het koninklijk besluit van 6 februari 1971 betreffende de behandeling en de openbaarmaking van de bouwaanvragen. (Belgisch Staatsblad 17 mei 1989)

- Besluit van de Vlaamse Executieve van 23 maart 1989 tot aanvulling voor het Vlaamse Gewest van het ministerieel besluit van 25 maart 1981 tot vaststelling van de samenstelling van het dossier voor de aanvraag om vergunning tot het uitvoeren van infrastructuurwerken en werken van burgerlijke bouwkunde, ingediend op grond van artikel 48 van de wet van 29 maart 1962 houdende organisatie van de ruimtelijke ordening en de stedebouw. (Belgisch Staatsblad 17 mei 1989)

- Besluit van de Vlaamse Executieve van 23 maart 1989 tot wijziging voor het Vlaamse Gewest van het koninklijk besluit van 22 juni 1971 tot bepaling van de publiekrechtelijke personen voor wie bouw- en verkavelingsvergunningen worden afgegeven door de gemachtigde ambtenaar, de vorm waarin deze zijn beslissingen neemt, en de behandeling van de aanvragen tot verkavelingsvergunning. (Belgisch Staatsblad 17 mei 1989)

**2. Walloon Region**

**2.1. Decree**

- Décret du 11 septembre 1985 organisant l'évaluation des incidences sur l'environnement dans la Région wallonne. (Moniteur Belge 24 janvier 1986)

**2.2. Administrative Order**

- Arrêté de l'Executif régional wallon portant exécution du décret du 11 septembre 1985, organisant l'évaluation des incidences sur l'environnement en Région wallonne. 19 juillet 1990. (Moniteur Belge 2 octobre 1990)

**Table 2: Chemical installations subjected to EIA Comparison between the EEC Directive 85/337 and the legislation in the Flanders region of Belgium**

**1. EEC Directive**

Annex I 6. Integrated chemical installations

Annex II 6. Chemical industry

(a) Treatment of intermediate products and production of chemicals (unless included in Annex I).

(b) Production of pesticides and pharmaceutical products, paint and varnishes, elastomers and

peroxides.

(c) Storage facilities for petroleum, petrochemical and chemical products.

**2. Flanders regulations**

Integrated chemical installations, defined as installations for the conversion by chemical processes of:

a) unsaturated aliphatic hydrocarbons with less than 5 carbon atoms per molecule;

b) unsaturated cyclic hydrocarbons, including aromatics, with less than 9 carbon atoms per molecule; with an annual production capacity of 100 000 tons or more. (A.O. I art. 3 no. 6)

Petrochemical installations or subsequent production facilities for cracking and gasification of naphtha, gas oil, L.P.G. or other petroleum fractions with a production capacity of 500 000 tons per year or more. (A.O. I art. 3 no. 15)

Installations for the manufacture of one of the following products:

a) phenols, carbon disulphides and mercaptans with an annual capacity of 10 000 tons or more;

b) amines and halogenated organic compounds with an annual capacity of 30 000 tons or more. (A.O. I art. 3 no. 16)

Production of pesticides with an annual capacity of 30 000 tons or more. (A.O. I art. 3 no. 17)

**Table 3: Comparison between Annex II of the European Directive 85/337 and the applicable regulations in the Flanders region**

**1.Agriculture**

**(a) projects for the restructuring of rural land holdings**

- area with total surface larger than 1000 hectares
- projects in relation to the following area types:
  - a nature reserve according to the regional plans for land use; or
  - a valuable ecological area according to the regional plans for land use; or
  - a bird protection area as determined according to the EEC Directive 79/409 of april 2 1979 and/or "Ramsar" area. (A.O. II - art. 2 no. 14)

**(b) projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes**

- forest clearing directed at another type of land use insofar as the area to be cleared exceeds 3

hectares (A.O. II - art. 2 no. 16)

**(c) water-management projects for agriculture**

- water management projects which influence the water regime in the following area types :
  - a nature reserve according to the regional plans for land use; or
  - a valuable ecological area according to the regional plans for land use; or
  - a bird protection area as determined according to the EEC Directive 79/409 of april 2 1979 and/or "Ramsar" area. (A.O. II - art. 2 no. 15)

**(d) initial afforestation where this may lead to adverse ecological changes and land reclamation for the purposes of conversion to another type of land use**

identical with no criteria or thresholds (A.O. II - art. 2 no. 17)

**(e) poultry-rearing installations**

- rearing installations for poultry, fowls, ducks, and aviary birds older than 3 weeks when the number exceeds:
  - 20 000 when the installation is located in a non-agricultural area;
  - 40 000 when the installation is located in an agricultural area, either at less than 300 meters from a housing area or at less than 500 meters from a drinking-water supply;
  - 80 000 when the installation is located in an agricultural area other than specified above. (A.O. I - art. 3 no. 8)

**(f) Pig-rearing installations**

- pig-rearing installations when the number exceeds :
  - 1 000 when the installation is located in a non-agricultural area;
  - 3 000 when the installation is located in an agricultural area, either at less than 300 meters from a housing area or at less than 500 meters from a drinking-water supply;
  - 5 000 when the installation is located in an agricultural area other than specified above. (A.O. I - art. 3 no. 9)

**2. Extractive industry**

**(c) Extraction of minerals other than metalliferous and energy-producing minerals, such as marble, sand, gravel, shale, phosphates and potash**

- industrial quarries and excavation sites for sand, gravel, clay etc. when the total area exceeds 10 hectares.

(A.O. I - art. 3 no. 10)

**(l) Coke ovens (dry coal distillation)**

- production of cokes from coal when the annual production capacity equals or exceeds 1 million tons. (A.O. I - art. 3 no. 12)

**3. Energy industry**

**(c) Surface storage of natural gas**

- installations for storage and transfer of L.N.G. with a storage capacity of 100 000 cubic meters or more. (A.O. I art. 3 no. 11)

**(e) Surface storage of fossil fuels**

- storage and transfer of coal and ores when the area equals or exceeds 50 hectares. (A.O. I art. 3 no. 19)

**4. Processing of metals**

**(b) Installations for the production, including smelting, refining, drawing and rolling, of non-ferrous metals, excluding precious metals**

- production facilities for primary non-ferrous metals with an annual capacity of 50 000 tons or more. (A.O. I art. 3 no. 13)

**(k) Installations for the roasting and sintering of metallic ores**

- facilities for roasting, pelletising or sintering of ores with an annual capacity of 1 million tons or more. (A.O. I art. 3 no. 12)

**6. Chemical industry**

Table 2 lists the types of chemical installations which are subjected to E.I.A in Flanders.

**10. Infrastructure projects**

**(a) Industrial-estate development projects**

- when the area surface equals or exceeds 100 hectares. (A.O. II art. 2 no. 6)

**(b) Urban development projects**

- projects where demolition, construction, or rebuilding activities are planned in a merged area with
  - 2 000 or more houses; or
  - a total surface of 10 hectares; or

- office space with a total gross floor surface of 100 000 square meters or more. (A.O. II art. 2 no. 7)

**(f) Dams and other installations designed to hold water or store it on a long-term basis**

- construction of a water-basin when the surface area is equal to 50 hectares or more. (A.O. II art. 2 no. 12)

**(h) Oil and gas pipeline installations**

- construction of a main transport line for liquid or gas situated in one of the following area types :
  - a nature reserve according to the regional plans for land use; or
  - a valuable ecological area according to the regional plans for land use; or
  - a bird protection area as determined according to the EEC Directive 79/409 of april 2 1979 and/or "Ramsar" area. (A.O. II art. 2 no. 9)

**(i) Installation of long distance aqueducts**

- construction of a main transport line for liquid or gas situated in one of the following area types :
  - a nature reserve according to the regional plans for land use; or
  - a valuable ecological area according to the regional plans for land use; or
  - a bird protection area as determined according to the EEC Directive 79/409 of april 2 1979 and/or "Ramsar" area.
  - construction of a main transport line different from the above conditions when the distance beyond the built area equals or exceeds 10 kilometres and the pipe diameter equals or exceeds 1 meter. (A.O. II art. 2 no. 9 and no. 13)

**(j) Yacht marinas**

- when the number of fixed docking places equals or exceeds 500 (A.O. II art. 2 no. 8)

**11. Other projects**

**(a) Holiday villages, hotel complexes**

- when the total area equals or exceeds 20 hectares. (A.O. II art. 2 no. 10)

**(c) Installations for the disposal of industrial and domestic waste**

- with an annual capacity of 25 000 tons or more. (A.O. I art. 3 no. 18)

**Addendum: Projects which do appear in the Flanders regulations while not being explicitly included in Annex II of the European Directive:**

- installations for rearing fur-bearing animals when the number exceeds 5 000. (A.O. I art. 3 no 20)

- installations for rearing indigenous small mammals when the number exceeds 10 000. (A.O. I art. 3 no 21)

- installations for rearing indigenous large mammals when the number exceeds 2 500. (A.O. I art. 3 no 22)

- erection of a tourist or recreational facility
  - which may attract an average traffic flow of 1 000 vehicles or more per day of operation; or
  - which covers an area of 50 hectares or more; or
  - which may include a complete golf course. (A.O. II art. 2 no 2)

**Table 4: Comparison between Annex II of the European Directive 85/337 and the applicable regulations in the Walloon region.**

Important note: Other projects listed in Annex II of the European Directive may be subjected to a full EIA study in Wallonia. Such a decision is made on a case-by-case basis and based upon an initial environmental evaluation note.

**1. Agriculture**

**(b) Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes**

identical with no thresholds or criteria (A.O. art. 2 § 2 no. 1)

**10. Infrastructure projects**

**(d) Construction of roads, harbours, including fishing harbours, and airfields (projects not listed in annex I)**

- construction of airfields with a runway length of more than 1200 meters. (A.O. art. 2 § 2 no. 2)

**(f) Dams and other installations designed to hold water or store it on a long term basis**

identical with no thresholds or criteria (A.O. art. 2 § 2 no. 2)

11. **Other projects**

**(a) Holiday villages, hotel complexes**

- holiday villages and week-end residential areas. (A.O. art. 2 § 2 no. 3)

**(b) Permanent racing and test tracks for cars and motor cycles**

- as defined by the royal order of 10 june 1976. (A.O. art. 2 § 2 no. 4)

**Addendum: Projects which do appear in the Walloon regulations while not being explicitly included in Annex II of the European Directive**

- dancing establishments which are located within 300 meters from a housing area. (A.O. art. 2 § 2 no. 4)

Table 5: List of draft proposals for EIA legislation, currently under discussion in Belgium.

(status : July 1991)

1. **Flanders Region**

- Voorontwerp van decreet houdende organisatie van de milieu-effectbeoordeling van bepaalde openbare en particuliere projecten.

2. **Walloon Region**

- Arrêté de l'Exécutif régional wallon du ... portant exécution du décret du 11 septembre 1985 organisant l'évaluation des incidences sur l'environnement dans la région wallonne (version juin 1991).

3. **Brussels-Capital Region**

- Projet d'Ordonnance relative à l'évaluation des incidences en milieu urbain. Ontwerp van Ordonnantie betreffende de beoordeling van de stedelijke milieu-effecten.

## EIA REGULATORY DEVELOPMENTS JULY 1991 - MARCH 1992

**Walloon Region**: Administrative Order (Moniteur Belge 22 novembre 1991) - contains a

common reporting format for the initial environmental evaluation, and a list of projects for which EIA is mandatory.

## ANNEX FOR DENMARK

### 1. EXTENT OF FORMAL COMPLIANCE BY DENMARK WITH THE REQUIREMENTS OF THE DIRECTIVE

#### (a) Principal legal provisions

In Denmark a form of environmental impact assessment has been carried out since 1972. The legal provisions relevant to the transposition of the EEC Directive have been strengthened by amending the National and Regional Planning Act, the Regional Planning Act for the Metropolitan Area and the Environmental Protection Act, Act No. 216 of 5 April 1989. These amendments aim to integrate EIA into the existing physical planning system. Executive Order No. 446 of 23 June 1989 on the environmental impact assessment of major projects and Executive Order No. 379 of 1 July 1988 on EIA of major projects in coastal waters (trading ports, etc., where the decision is taken by the Ministry of Transportation) have also been issued. Additionally, Executive Order No. 119 of 26 February 1991 specifies part of the EIA procedure.

The projects stipulated in Annex I of the Directive and the following types of projects from Annex II are included in Executive Order No.446:

1. Chemical installations covered by the Seveso Directive (82/501/EEC).
2. Cultivation of natural areas of more than 300 ha.
3. Drainage and irrigation of areas more than 300 ha.
4. Opencast mining of raw materials for a period of more than 10 years or with an annual production of more than 200,000m$^3$ (not including sand and gravel).
5. Cement works and moler (clay) works.
6. Limeworks with an annual production of more than 200,000m$^3$.
7. Holiday hotels with more than 75 rooms in coastal or special nature areas.

Most of the remaining projects mentioned in Annex II will be subject to environmental approval according to the Danish Environmental Protection Act (see section 2 and the Appendix).

According to the types of projects to which Executive Order No.446 of 23 June 1989 applies the EIA procedure will vary:

- Normally the regional authority prepares a supplement to the approved regional plan. The supplement will consist of the EIA for the specific project and is prepared according to the existing procedures in the National and Regional Planning Act which means, at present, 16 weeks of public consultation before adoption. The supplement has to be approved by the Minister of the Environment. After the supplement has been approved the necessary permissions according to other laws can be given by the regional authorities. For projects covered by the Danish Environmental Protection Act an EIA will also include an environmental approval (see section 2).

- A new Planning Act was approved in June 1991 (Act No.388, which comes into force in January 1992). This Planning Act replaces the National and Regional Planning Act. The Planning Act changes the period of public consultation to 8 weeks and the approval by the Minister of the Environment will be replaced by a right of veto by the Ministry of the Environment.

- For projects of national importance, a National Planning Directive is prepared according to the National and Regional Planning Act. The National Agency for Physical Planning, Ministry of the Environment, is the competent authority in these cases. Approval for projects is given by the Minister of the Environment. The EIA procedure at this level differs from the regional level concerning public participation. It is not mandatory by law to consult the public before the approval of a National Planning Directive but, nevertheless, the National Agency for Physical Planning has chosen to follow the same procedure as for regional level approvals.

- For projects adopted by a specific act of national legislation no formal EIA procedure exists. Nowhere is it indicated which types of projects require a specific national act for approval. In general, these will probably be national infrastructural projects financed by the Ministry of Transportation and projects of national importance. An informal agreement between the Ministry of the Environment and the Ministry of Transportation guarantees that the following steps will be carried out:

- EIS, in full compliance with the Directive, will be prepared, before the bill is introduced in the Parliament;
- The notes to the act will contain a reference to the EIA;
- The notes to the act will contain the environmental conditions for the project;
- The Ministry of the Environment will participate in formulating the environmental conditions and notes to the act.

These steps mean that for projects approved by specific acts:

- an EIA is prepared at an early stage in the process;
- the EIA is made accessible to the public when the bill is introduced in Parliament;
- the public have the opportunity to influence the legislation;
- the EIA does not contest the validity of the Danish Fundamental Law.

**(b) Further analysis and possible deficiencies in formal compliance**

In the case of Executive Order No.446 projects there are no deficiencies in formal compliance. Denmark has made legal provision for all the requirements in the Directive. This covers projects of all the classes listed in Annex I and the seven Annex II projects mentioned above. In the case of i) the remaining Annex II projects, ii) the projects adopted under the Raw Materials Act, and iii) projects in coastal waters (Executive Order No.379), there are some deficiencies in formal compliance with the requirements in the Directive.

i) Annex II projects which are not covered by Executive Order No.446 are approved by the previously existing legislation, mainly the Environmental Protection Act but also the Water Supply Act, the Raw Materials Act and the Nature Conservation Act (see Appendix). Projects that are approved under Chapter 5 of the Environmental Protection Act will be subject to an assessment which, according to Ministry sources, is in accordance with Article 5.2, except in respect of the non-technical summary. Also, there is an opportunity for the public involved to express their opinion before the projects are initiated as part of the complaints procedure following the decision.

Despite the lack of investigation of the impact on landscape, cultural heritage and architecture, the National Agency for Physical Planning, Ministry of the Environment, asserts that these Annex II projects can only be located in industrial zones. The Agency states that such matters have no relevance for single projects because they are taken into account for the zone as a whole, in the approval process for the Regional Development Plan and the Local Development Plan provided for in the National Regional Planning Act. Outside areas covered by local development plans only buildings in connection with agricultural activities are permitted. This is controlled by the Urban and Rural Zone Act.

ii) For projects approved under the Raw Materials Act all the information mentioned in Annex III of the Directive is taken into account, except for a non-technical summary. There is the same opportunity as mentioned above for the public involved to express an opinion before the project is initiated.

iii) For projects in coastal waters the extent of the EIA is stated in Executive Order No.379 of 1 July 1988. The only deficiency in formal compliance with the Directive is the absence of the opportunity for the public to express an opinion before the project is initiated.

(c) <u>Reasons for delays in full compliance</u>

The Ministry of the Environment argues that the principal reasons for these deficiencies vary with the type of project:

i) Projects covered by previous legislation can only be located in zones where the topics covered by the EEC Directive are taken into account for the zone as a whole, rather than project by project, as mentioned above. The appeal procedure has a 4 week period for complaints against the decision. The decision and the possibility of appeal must be announced in the press and any complaint delays the initiation of the new project.

ii) A requirement for projects not covered by Executive Order No.446, but subject to the Raw Materials Act, to be assessed is in force. Furthermore an appeal procedure similar to the one described under i) is allowed under the Act.

iii) For projects falling under Executive Order No.379, the Order provides the Ministry of Transportation with the power to demand the information stated in the Directive from the developer. The Executive Order does not contain requirements for public participation procedures. However, for projects in coastal waters the Ministry of Transportation is always the competent authority for approval of projects, and the Ministry is under an obligation to follow the requirements in the Directive and has to define a procedure to allow the public concerned an opportunity to express an opinion before the project is initiated. In practice, this means that there is full compliance with the Directive in the case of these projects, notwithstanding the absence of a formal requirement.

**(d) Remedy of any remaining deficiencies**

As a consequence of the reasons above there are, at present, no further EIA measures in the process of being implemented.

**(e) Competent authorities**

The competent authority dealing with EIA varies depending on the planning level at which the EIA is prepared:

- In the counties the competent authority is the regional authority, of which there are 16 in Denmark. Regional planning, physical planning, socio-economic issues and environmental impact assessment are some of the usual functions and responsibilities of the regional authorities;

- In case of a National Planning Directive the competent authority is the Ministry of the Environment (the National Agency for Physical Planning). Approvals for projects are given by the Minister of the Environment. Coordination of physical planning and legislative measures is amongst the usual functions and responsibilities of the Agency;

- for projects adopted by a specific act of national legislation and for projects in coastal waters the Ministry of Transportation is the competent authority.

The authorities mentioned are all designated in general terms. Most of the approvals are decided regionally by the county or locally by the municipality. Only in the case of a complaint about the final decision will the central authorities be informed.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

### (a) Outline of criteria/thresholds

As mentioned above, seven types of projects have been selected from Annex II of the Directive and special criteria for these projects have been established except for one category. The criteria are described in Executive Order No.446 of 23 June 1989. For the cement and moler works category the lack of specific criteria demonstrates that there are few of these plants in Denmark.

Table 1, in the appendix to this annex, shows which of the Annex II projects are subject to an environmental approval according to the Danish Environmental Protection Act and other legislation. It will be seen that virtually all Annex II categories are covered by the various provisions.

The Environmental Protection Act states a procedure for approval of all newly constructed plants (and of modified plants if the expansion implies a significant increase in pollution and activity generally. Chapter 5 in the Act regulates air pollution, noise and vibration and Chapter 4 regulates water pollution. These specific regulations are coordinated in a receiving water quality planning system and in a waste planning system. Approximately 25,000 enterprises, plants and activities are listed in an annex to the Environmental Protection Act as being subject to an environmental approval process. There is no screening procedure, but for many types of industries, the criterion for a Chapter 5 approval is more than 6 persons employed. This is one reason for the high number of projects. In 1991 the Danish Environmental Act was changed with the objective of reducing the number of new plants and activities which need an approval by 50 percent.

### (b) Comment on criteria/thresholds

The criteria for the selection of projects from Annex II appear to be precise and reasonable. They cover the most common and the most polluting Annex II activities in Denmark.

The environmental approval system, under the provisions of the Environmental Protection Act, is a very effective and decentralized system of approval covering many of the remaining polluting projects in Annex II.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

### (a) Number and categories of EISs

In the period between June 1989 and June 1991 12 EISs have been published under Executive Order 446 of 23 June 1989. Four of these are for Annex I projects. Two projects belong to Category 9 (waste disposal installations) of Annex I, one project belongs to Category 7 (motorways) and one project to Category 8 (trading ports). Eight Annex II projects have been published under Executive Order No.446. Seven of these projects belong to Category 11a of Annex II (holiday hotels) and one belongs to Category 3d (underground storage of combustible gases).

### (b) Information specified in Article 5 and Annex III

Because of the tradition of using environmental approvals a developer in Denmark is used to providing relevant information relating to environmental issues to the authorities. All of the information specified in Article 5(2) of the Directive is demanded in existing Danish legislation. The same can be said about the full information requirements in Article 5 and Annex III of the Directive, though there are some shortcomings. Compared to the EIA system the environmental approval does not contain the coverage of flora/fauna, cultural heritage, visual aspects, landscape and the interaction between the issues. Nor is any formal 'statement' prepared. Some ecological aspects will be covered by the planning procedure related to environmental quality planning.

For minor projects it can be troublesome to obtain satisfactory information partly because of the costs and partly because of the expected minor impact. However, for large projects there will usually be good cooperation between the developer and the authorities in providing each other with satisfactory information.

Concerning alternatives, Executive Order No. 446 is more strict than the Directive. Investigated alternatives to the submitted project have to be described in the EIS. This makes it possible for the general public, local environmental amenity groups and public bodies with statutory environmental responsibilities to comment and perhaps to demand an alternative solution.

(c) **Making authorities' information available to the developer**

The authorities make sufficient relevant material available to the developer.

(d) **Arrangements for publication of EIS**

The authorities announce where and when it is possible to obtain a copy of the EIS. Sometimes this is free and sometimes it has to be paid for. The arrangements for publication of the EIS and the Chapter 5 approvals are functioning satisfactorily in practice.

(e) **Arrangements for consultation and public participation**

The situation with only 12 EIAs for Annex I and Annex II projects performed makes it difficult to comment authoritatively on public participation questions. In regional planning, to which EIA is connected, there exists a tradition of public participation. Public participation is stipulated by law in the National and Regional Planning Act and the Nature Protection Agency is consulted on all plans. The procedure involves publication of the proposed regional plan and consultations with the general public in a 16 weeks period.

An approval from the local authorities has to be published in the local press and there is a period of 4 weeks in which to appeal against a final decision. Everybody affected by the decision and any party likely to have an individual, significant interest in the outcome of the decision has the right of appeal against it. In some specified areas environmental amenity

groups, like the National Danish Society for Preservation of Nature, have the right of complaint stated in the legislation. In practice, an environmental approval protects the plant from new demands for a period of 8 years.

In general, public consultation and participation arrangements appear to be amongst the best in the EEC. The press in Denmark is very active in relation to environmental issues generally. Another reason is the tradition of public participation in connection with regional and local development planning since the middle of the 1970s. A freedom of information act gives a public right of access to files held by regional and municipal authorities.

**(f) Transborder impacts**

Executive Order No.446, Paragraph 2, makes provision for consultations over transborder environmental impacts. It is always the central authorities that undertake these consultations. There has, to date, been only one project in which a notification of neighbouring EEC countries about transborder impacts has been relevant. This is the project to provide a bridge between Denmark and Sweden: Germany has been notified.

**(g) Role of EIS and consultation findings in project authorization**

Executive Order No.119 of 26 February 1991 specifies that an approved EIS is necessary for authorizations given in pursuance of the following acts:

- The Environmental Protection Act;
- The Water Supply Act;
- The Raw Materials Act;
- The Nature Conservation Act.

The public has the right to be informed about the resulting decision and an EIS has to be announced. The authorities publish, according to the planning level, either a supplement to the regional plan, a Circular or an Act containing information about the environmental conditions and the resulting decisions.

In Denmark "integrated chemical installations" is interpreted to mean the installations regulated by the Seveso Directive (82/501/EEC). It has so far resulted in problems "catching" all the relevant projects for which an EIA should be undertaken. For large projects there are no problems because the competent authorities are the authorities at the regional level and they are aware of the EIA procedure. For minor projects the municipalities are the competent authorities and they are not yet fully aware of the consequences of Executive Order No.446. But the National Agency for Physical Planning is aware of this problem and has planned an information campaign directed to local authorities.

In relation to Article 2(3) of the Directive, there have been no exemptions of specific projects in Denmark.

### (h) Modification of projects

In two cases the undertaking of an EIA has resulted in minor but significant changes in the final project. In one case, relating to natural gas storage, the internal locations of buildings and security zones were amended. In the other case, Helsingør Ferryport, the preservation of popular views of the Castle of Kronborg was enhanced. However, it appears that the actors (administrators, developers, politicians, the public, etc) acknowledge the possibilities of EIA in discussing different solutions and alternatives.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO DANISH LEGISLATION AND PRACTICE

### (a) Measures to monitor implementation of Directive

It is expected that there will be between 10 and 20 projects per year in relation to Annex I and II for which a full EIA will be undertaken, and up to around 3500 projects subject to the approval system in relation to Chapter 5 in the Environmental Protection Act. There will also be several hundred projects subject to the Water Supply Act, the Raw Materials Act and the Nature Conservation Act.

Most of the projects subject to EIA will, at the same time, need an environmental approval according to the Environmental Protection Act. The existing review and monitoring

bodies will also be involved in EIAs. In particular, monitoring of the specific conditions for a project is required in the environmental regulations.

To assist implementation of EIA for Annex I and II projects, covered by Executive Order No.446, several steps have been taken:

- implementation in the regional and planning acts;
- announcement of this to the authorities and the public;
- a leaflet about EIA;
- a seminar with regional authorities about EIA;
- several meetings for different authorities responsible for EIA;
- articles about EIA in relevant periodicals;
- the establishment of two science centres working on EIA in collaboration with the authorities;
- a more comprehensive leaflet about EIA;
- periodic information about EIA from the National Agency for Physical Planning (the overall authority in EIA matters);
- an exhibition about EIA;
- a Nordic Council publication about EIA;
- a Nordic Council seminar about EIA.

It appears that, at present, the regional authorities, developers and the public feel that they are well informed concerning the EIA procedure and formal criteria for quality, adequacy and appropriate coverage of an assessment.

**(b) Provision for scoping**

There is no formal procedure for scoping, but quality, coverage and adequacy are currently encompassed in the monitoring process by the authorities and during public participation when the responsible authorities must deal with questions raised by the public. As a result of experience to date, the National Agency for Physical Planning does not intend for the moment to create any other mandatory provision for the scoping process. Current practice

involves an interplay between authorities and the developer which means that the authorities must handle the assessment in such a way that experts cannot afterwards deny its quality. The authorities are accustomed to use experts, for instance from other sectors of the central administration in scoping. Scoping is thus a closed process, but appears to work.

(c) Quality of EISs

It appears that 7 out of the 12 projects that have been subject to formal EIA to date are not of satisfactory quality. The main kinds of deficiencies relate to:

- assessment of impact on the environment, visual effects and effects on landscape (holiday hotels, 5 projects);
- assessment of the impacts of emissions of certain substances;
- assessment of alternatives;
- assessment of long term effects.

It is obvious that one of the main causes for some of these deficiencies is the lack of guidelines for EIA and for methods of assessment of impacts. Lack of experience must also be important, as well as political resistance from the regional authorities especially in relation to holiday hotels. Finally, it seems that the advantages of the association of EIA with national and regional planning are not being fully achieved.

(d) Provision for formal review of adequacy and quality of EISs

Legal provision for the formal review of the adequacy and quality of EISs is included in the executive orders made to implement the Directive. In Denmark the statements are prepared by the authorities, not the developer. This means that the developer is obliged to provide the authorities with all the relevant information about the intended project. The legal power to demand information of the developer is provided in the National and Regional Planning Act. These legal provisions also make it possible for the authorities to demand an EIS from the developer, but it is usually the authorities which prepare the EIS.

The review is a part of the approval procedure. One result of this public procedure is

that, if the quality of the statement is not considered good enough, something must be added, for example more relevant information on alternatives. In this case a new statement has to be prepared and this will be the document laid down for approval. Checking the quality of the statement is a part of the public participation process. For instance, other authorities in the central administration, e.g. technical experts, will be consulted or given the opportunity to express their opinions during the public participation process.

Formal review bodies have not been established, but the National Agency for Physical Planning has supported the establishment of two reference centres for EIA. One is at the Department for Environment, Technology and Social Studies, Roskilde University and the other is at the School for Architecture, Royal Academy of Arts. These reference centres are supposed to support the authorities with background information related to specific projects and they are creating a network of scientists and resource institutions, at a national and international level, to fulfil this purpose.

(e) **Provision for monitoring and post-auditing**

Monitoring after approval and implementation of a project is likewise a part of the planning process and the legal provision for it is part of the implementation of the Directive and the Environmental Protection Acts. Local authorities following these acts are obliged to inspect the implementation of a project and to ensure that the measures, standards and specific threshold limiting values given in the approval are followed. This monitoring is undertaken regularly.

As far as is known this procedure is unique to Denmark. This inspection and control system has been in force since the first Environmental Protection Act in 1974, and experience has been, in general, very good when compared with a planning system that does not have these procedures.

(f) **Assistance to practitioners**

The list of activities to monitor the implementation of the EIA procedure (see 4(a) above) have all been made by governmental organisations. Further work for this purpose, especially in relation to practitioners, will be made by the EIA reference centres. This includes training

programmes both for students and practitioners outside universities.

(g) Effect on timescale, costs, etc.

Generally, it is thought that both the costs and timescale of projects are being affected only very moderately as a result of undertaking an EIA. This is because the existing planning procedure in Denmark already includes the assessment of impacts on the environment because of the existing inspection and control procedure and because it is the authorities that accumulate experience and knowledge about EIA. (It is, of course, the authorities that prepare the EIS.) In some projects it can be expected that the cost will be reduced because of better planning by the developer and by the authorities and because of better and less costly construction of the project and less costly operation of it.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

(a) Provisions already made

It is still a matter of discussion whether or not Denmark has fully complied with the Directive. This discussion relates to Annex II projects where seven types of projects, with criteria, have been selected to be subject to EIA. For the remaining Annex II projects, there is no statement of general categories to be assessed nor a procedure for the examination of every project to determine whether an EIA is needed or not.

(b) Ambiguities in the Directive

The provisions of the Directive do not appear to be too ambiguous. An essential advantage of the EIA process is that all the information required by Article 5 and Annex III is considered simultaneously in the assessment. The complication weakness of Danish EIA in relation to Annex II projects not covered by Executive Order No. 446 is that the total assessment is not undertaken at the same time. This is not optimal environmental management.

However, Annex II consists of a highly heterogeneous list of activities in relation to their impacts on the environment and the Directive does not provide sufficient guidance about how to introduce EIA for all these activities. In particular the Directive is unclear about how to

implement EIA for the most important projects in relation to their impacts on the environment.

(c) Recommendations for more satisfactory, cost-effective compliance in Denmark

To facilitate more practical compliance in Denmark, by cost effective means, it is recommended that the EIA process and the environmental approval system in relation to Chapter 5 of the Environmental Protection Act are combined where both requirements apply.

Furthermore, it is proposed that the Ministry of the Environment should be the only central authority in EIA matters, rather than (as at present) sharing responsibility with the Ministry of Transportation. In situations where two or more EIA procedures have been undertaken for the same project, the possibility of creating an EIA procedure in which the EIA and the following approval provides a framework and principal approval for the specific project should be considered. Afterwards, minor changes made during the construction process could be made subject to an environmental assessment approval process like the Danish Chapter 5 approval system. This could result in a better total assessment of the project, a greater reduction in unfavourable impacts on the environment and could also lead to a reduction in costs for the whole process.

## APPENDIX

### Table 1: Projects subject to EIA, EPA, Chapter 5 and other approvals in Denmark

| Category of projects | EPA | NPA | RMA | WSA | LP | EIA PL | Other or comments |
|---|---|---|---|---|---|---|---|
| Annex 1 | | | | | | | |
| 1. Crude oil refineries | chap5a | | | | (x) | EIA x | |
| 2. Thermal power stations | chap5a | | | | x | EIA x | |
| 3. Radioactive waste installations | chap5a | | | | x | EIA x | |
| 4. Integrated steel works | chap5a | | | | (x) | EIA x | |
| 5. Asbestos works | chap5a | | | | (x) | EIA x | |
| 6. Integrated chemical installations | chap5a | | | | (x) | EIA x | |
| 7. Motorways etc. | | §42 | | | | EIA x | state financed, specific act of national legislation. |
| 8. Ports etc. | | | | | | EIA x | |
| 9. Toxic waste disposal installations | chap5a | | | | (x) | EIA x | |
| Annex 2 | | | | | | | |
| 1. Agriculture | | | | | | | |
| a) Restructuring of rural land holdings | - | - | | | - | - | remains |
| b) Use of uncultivated land | | §43 | | | | EIA | > 300 ha |
| c) Water-management | | §43 | | x | | EIA | > 300 ha |
| d) Initial afforestation | | | | | | x | - zones for afforestation |
| e) Poultry-rearing installations | chap5m | | | | | | only industrial plants > 20,000 poultry |
| f) Pig-rearing installations | chap5m | | | | | | only industrial plants > 120 pigs |
| g) Salmon breeding | | §43 | | | | | Zone Act |
| h) Reclamation of land from the sea | | | | | | | approval from Ministry of Transportation |
| 2. Extractive industry | | | | | | | |
| a) Extraction of peat | | | x | | | EIA x | more than 10 year approval, or > 200,000m$^3$ / year |
| b) Deep drillings (water) | | | x | x | | | not including sand and gravel |
| c) Extraction of minerals | | | x | | | EIA x | in specific cases the Underground Act |
| d) Underground coal mining | | | x | | | | |
| e) Open-cast coal mining | | | x | | | | Underground Act |
| f) Extraction of petroleum | | | x | | | | Underground Act |
| g) Extraction of natural gas | | | | | | | |

## Table 1: continued

| Category of projects | EPA | NPA | RMA | WSA | LP | EIA PL | Other or comments |
|---|---|---|---|---|---|---|---|
| h) Extraction of ores | | | | | | | |
| i) Extraction of shale | | | | | | | Underground Act |
| j) Extraction of minerals | | | x | | | | Underground Act |
| k) Industrial installations for the extraction of coal, etc. | chap5a | | x | | (x) | EIA x | more than 10 year approval or > 200,000m³ / year |
| l) Coke ovens | chap5m | | | | (x) | | |
| m) Installations for the manufacture of cement | chap5a | | | | (x) | EIA x | |
| 3. Energy industry | | | | | | | |
| a) Industrial installations for production of electricity | chap5a/m | | | | x | x | a > 30MW, m > 120KW |
| b) Industrial installations for carrying gas, etc. | | §42 | | | | (x) | |
| c) Surface storage of natural gas | chap5m | | | | (x) | (x) | |
| d) Underground storage of combustible gases | chap5m | | | | (x) | (x) | |
| e) Surface storage of fossil fuels | chap5m | | | | (x) | (x) | |
| f) Industrial briquetting of coal and lignite | chap5m | | | | | | |
| g) Installations for the production of nuclear fuels | chap5a} | | | | | | |
| h) Installations for the reprocessing of nuclear fuels | chap5a}x | | | | x | EIA x | x risk impacts |
| i) Installations for the collection of radioactive waste | chap5a} | | | | | | |
| j) Installations for hydroelectric energy production | see under a) | | | | x | x | |
| 4. Processing of metals | | | | | | | |
| a) Iron and steelworks | chap5a/m | | | | (x) | | |
| b) Installations for the production of non-ferrous metals | chap5a/m | | | | (x) | | |
| c) Pressing of castings | chap5a | | | | (x) | | |
| d) Surface treatment of metals | chap5m | | | | (x) | | |
| e) Boilermaking | chap5m | | | | (x) | | |
| f) Manufacture and assembly of motor vehicles | chap5 | | | | | | |
| g) Shipyards | chap5m | | | | (x) | | |
| h) Installations for the construction of aircraft | chap5a | | | | (x) | | |
| i) Manufacture of railway equipment | chap5 | | | | (x) | | |
| j) Swaging by explosives | chap5 | | | | (x) | | |
| k) Installations for the roasting of ores | chap5 | | | | (x) | | |

## Table 1: continued

| Category of projects | EPA | NPA | RMA | WSA | LP | EIA PL | Other or comments |
|---|---|---|---|---|---|---|---|
| 5. Manufacture of glass | chap5a | | | | (x) | | |
| 6. Chemical industry | | | | | | | |
| a) Production of chemicals | chap5a | | | | (x) | EIA x | risk impacts |
| b) Production of pesticides, etc. | chap5a/m | | | | (x) | EIA x | risk impacts |
| c) Storage facilities for petroleum | chap5a/m | | | | (x) | EIA x | risk impacts |
| 7. Food industry | | | | | | | |
| a) Manufacture of oils | chap5m | | | | (x) | | |
| b) Packing of products | chap5m | | | | (x) | | |
| c) Manufacture of dairy products | chap5m | | | | (x) | | |
| d) Brewing and malting | chap5m | | | | (x) | | remains |
| e) Confectionery and syrup manufacture | - | | | | - | | |
| f) Installations for slaughter | chap5a | | | | (x) | | |
| g) Industrial starch manufacturing installations | chap5m | | | | (x) | | |
| h) Fish-metal factories | chap5m | | | | (x) | | |
| i) Sugar factories | chap5a | | | | (x) | | |
| 8. Textile, leather, wood and paper industries | | | | | | | |
| a) Wool factories | chap5m | | | | (x) | | |
| b) Manufacture of board | chap5a/m | | | | (x) | | |
| c) Manufacture of pulp | chap5a | | | | (x) | | |
| d) Fibre-dyeing factories | chap5m | | | | (x) | | |
| e) Cellulose-processing installations | chap5a | | | | (x) | | |
| f) Tanneries | chap5a | | | | (x) | | |
| 9. Rubber industry | | | | | | | |
| Manufacture of elastomer-based products | | | | | | | > 100 tonnes per year |

## Table 1: continued

| Category of projects | EPA | NPA | RMA | WSA | LP | EIA PL | Other or comments |
|---|---|---|---|---|---|---|---|
| 10. Infrastructure projects | | | | | | | |
| a) Industrial estate development projects | | | | | x | | |
| b) Urban-development projects | | | | | x | | |
| c) Ski-lifts and cable-cars | | | | | - | - | |
| d) Construction of roads | | x | | | (x) | x | > 10,000 vehicles |
| e) Canalization and flood-relief works | | | | | | x | Watercourses Act |
| f) Dams and others installations | | | | | | x | Watercourses Act |
| g) Tramways, etc. | | | | | (x) | x | specific act of national legislation |
| h) Pipeline installations | | | | | | x | specific act of national legislation |
| i) Long distance aqueducts | | | | | | x | |
| j) Yacht marinas | | x | | | | x | Ministry of Transportation |
| 11. Other projects | | | | | | | |
| a) Holiday villages, hotel complexes | | | | | x | EIA x | EIA > 75 rooms |
| b) Racing tracks for cars | chap5a | | | | (x) | x | |
| c) Waste disposal installations | chap5a | | | | x | | |
| d) Waste water treatment plants | chap5m | | | | (x) | | |
| e) Sludge-deposition sites | chap5a | | | | x | | |
| f) Storage of scrap | chap5m | | | | (x) | | |
| g) Test benches for engines | chap5m | | | | (x) | | |
| h) Manufacture of artificial fibres | chap5m | | | | (x) | | |
| i) Manufacture of explosives | chap5a | | | | (x) | EIA | |
| j) Knackers' yards | chap5m | | | | (x) | | |
| 12. Modifications to Annex I projects | x | | | | (x) | (x) | |

KEY EPA = Environmental Protection Act
NPA = Nature Protection Act
RMA = Raw Materials Act
WSA = Water Supply Act
LP = Local Development Plan
EIA = Environmental impact assessment
PL = National and Regional Planning Act
chap5a = approval given by the regional authorities
chap5m = approval given by the municipal authorities
x = Local or regional plan provision is compulsory, for individual projects
(x) = Local or regional plan provision is compulsory, but only for zones, not for projects

## Legal provisions in Denmark

| | | |
|---|---|---|
| 1. | Executive Order No. 446 of 23 June 1989. | Requires EIA for Annex I and 7 types of Annex II projects. |
| 2. | The National and Regional Planning Act | Deals with national, regional and local plans. Makes legal provision for information from developer to the authorities about projects that are to be subject to EIA (§ 11(3)) for a National Planning Directive (§ 3(3)). |
| 3. | The Urban and Rural Zone Act | Defines urban and rural development zones in Denmark. In rural areas building can only take place in connection with agriculture. |
| 4. | Executive Order No. 119 of 26 February 1991 | Specifies the EIA process in connection with:<br>- Environmental Protection Act<br>- Nature Protection Act<br>- Raw Materials Act<br>- Water Supply Act |
| 5. | Executive Order No. 379 | Specifies the EIA process for projects in coastal waters. |
| 6. | The Environmental Protection Act | Covers environmental protection planning and makes provision for Chapter 5 approvals. |
| 7. | Executive Order No. 783 | Specifies the Chapter 5 procedure, the legal provision for the developer to provide information about the project to the authorities, and the list of activities that must be approved in relation to Chapter 5. |
| 8. | The Nature Protection Act | Deals with planning for nature protection. |

| | | |
|---|---|---|
| 9. | The Raw Materials Act | Deals with the planning of raw materials extraction. |
| 10. | The Water Supply Act | Deals with drinking water supply planning. |

## ANNEX FOR FRANCE

### INTRODUCTION

The preparation of this annex has been carried out using a large number of official documents and reports on the French EIA system and also information gathered directly through interviews with officials of the Ministry of the Environment, with practitioners and consultants and with representatives of independent associations (see the appendix to this annex).

EIA legislation in France dates from 1976. The law on the protection of nature, 10/7/1976, put into force through the implementation decree of 12 October 1977, made environmental impact assessment compulsory from 1 January 1978 for construction works and development projects initiated by local authorities or private developers where these could affect the environment. This law also establishes that land use plans are required to contain an environmental study but this does not amount to an environmental impact assessment. The law on the protection of nature also resulted in changes to existing laws and to the passing of new laws which also affect the EIA system.

Other legislative provisions are relevant to the use of the EIA tool and contribute to its effectiveness. Among these, provisions relating to 'installations classées' (industrial facilities) make it compulsory to include an EIS with the documents presented in support of applications for authorizations. Another major piece of legislation relevant to environmental impact assessment was passed in 1983. The 12/7/83 law on public enquiries set out the procedures for public consultation on certain categories of construction works, development projects and land-use plans. The central element relevant to environmental impact assessment contained in this law and its subsequent decrees is the requirement that an environmental impact assessment, where it is required, must be part of the legal documents to be published for the public enquiry. Furthermore, there are many other procedural frameworks which relate specifically to certain types of projects.

Therefore, when looking at French compliance with Directive 85/337/EEC on EIA, two

important factors must be borne in mind:

1. The French EIA system is older than the Directive and therefore the formulation of the two may not match exactly.

2. The law for the protection of nature is the central framework for EIA. However, many additional provisions contained in other legislation establish specific procedures which contribute to make the tool more efficient for certain categories of projects. The "Instruction Mixte" procedure and the "Installations classées" procedure are the most important of these. In addition, it should be noted that the law for the protection of nature establishes, for certain cases, a simplified procedure called "notice d'impact".

Consequently, the examination of this system in regard to each of the requirements of the EEC Directive is more complex than for most other Member States and any evaluation must take into account the complexity of this legal framework.

## 1. EXTENT OF FORMAL COMPLIANCE BY FRANCE WITH THE REQUIREMENTS OF THE DIRECTIVE

### (a) Basic principles and coverage of legal provisions

The principal legal provisions relating to EIA and enacted by France are contained in the law on the protection of nature of 10/7/76 and its subsequent implementation decree of 12/10/77.

- In addition, the law on 'installation classées' of 19/7/76 and decrees of 21/9/77 concerning 'les installation classées' set up specific procedures for certain categories of projects, mainly in the industrial sectors.

- Furthermore, the law on public enquiries of 12/7/83 and subsequent decree of 23/4/85 contain legal provisions concerning information, consultation and participation, applicable

to most categories of projects.

- A number of ministerial circulars, instructions and orders on environmental impact assessment complement these provisions for specific sectors.

The principles which underpin the environmental impact assessment system are contained in the law on the protection of nature of 10/7/76. In Article 2, this law states that works and projects undertaken by public authorities, or which require a planning permission or a decision of approval, and land-use plans, must take into account environmental considerations. Further, the law establishes that the documents submitted prior to the implementation of projects which, as a result of their importance and dimensions, have a significant impact on the natural environment, must contain an environmental impact statement.

The law on the protection of nature of 10/7/76 also specifies the need for a decree to implement measures relating to:

- The procedures necessary for informing the public;
- The list of projects to be exempted because of their lack of impact on the environment;
- The conditions under which the Ministry of the Environment can review the EIS, through its own initiative or following an appeal by a third party;
- Finally, the procedures through which a project can be halted because of the absence of an EIS.

The principal elements of Decree 12/10/77 in application of Article 2 of the law on the protection of nature are:

- The submission of an EIS prior to the implementation of a project is the responsibility of the developer except where a special decree for certain projects or works puts a public

authority in charge of the EIA, for example, in the case of an application by a local authority for land clearance;

- All works and projects require an EIS before they can be implemented with the exception of those listed in a number of annexes included in the decree.

The categories of works and projects which are subject to EIA are therefore defined by default, with a number of projects requiring EIA specifically. The list of categories of projects and works which are subject to EIA as defined by the law on the protection of nature and its implementation decree can be found in the appendix. In addition, the provisions establish a two-level procedure, depending on the degree of impact of the project. The first is a full EIA and the second is a simplified procedure called a 'notice d'impact' (projects in the second category are listed in Table 1). The notice d'impact should however comply with all the requirements of the law, particularly with regard to its content (a decision by the Council of State in the "Madame Coutras case" concerning a micro-electric power station rejected the authorisation because of a poor notice d'impact).

A comparison between the list in the appendix in this annex and the categories contained in Annex I and Annex II of the EC Directive appear to show that the French basic law on EIA does not cover all of the categories covered by the EC Directive. However, this is mainly due to differences of formulation. The only projects that are permitted to dispense with an EIA are those "installations classées" which only require a 'declaration'; the "installation classées" which require an 'authorisation' are subject to EIA. In addition, a system of financial and technical thresholds exist for certain categories of projects.

The law on 'installation classées' of 19/7/76 is central to the EIA system since all the projects covered by it, and which require an authorization, are also subject to EIA. It governs:

'factories, workshops, warehouses, construction sites, quarries, and generally all

**Table 1: Projects and works requiring a simplified procedure or "notice d'impact"**

- Electrical energy transmission lines not exceeding 225kV
- Hydroelectric power generation facilities not exceeding 500kW capacity
- Mine and quarry prospecting works requiring authorization
- Camping sites not exceeding 200 places
- Ski resort facilities not exceeding 6 million francs in cost
- Works and projects involving:
  - modifying water falls
  - land rehabilitation in mountain areas
  - measures against avalanches
  - dune fixation
  - fire protection measures
  - land clearing works (except for urbanisation purposes within areas governed by land-use and development plans - "POS")
  - local sewage treatment facilities for less than 10,000 inhabitants
  - river or maritime public zones not exceeding 6 million Francs in cost
  - construction or expansion of marinas

installations, publicly or privately owned and which may cause hazard or damage for neighbouring areas, on health, safety, public hygiene, agriculture, or may damage the environment, natural sites and cultural heritage' (Article 1).

It therefore covers all types of activities including defence. However, these activities must be classified according to a nomenclature which is established by decree of the Council of State and

revised periodically. The list contains around 400 categories of project. (See: Journal Officiel, Installations Classées, Tome 1, textes généraux et nomenclature no. 1001-1.)

The 'code de l'urbanisme' requires a planning permission for all construction, modifications or changes of use of a building but this planning permission is not equivalent to an authorization for an 'installation classée'. The legal documents that have to be submitted for a planning permission and authorization of an 'installation classée' must contain an environmental impact statement. In addition, these two authorizations are granted through two different legal procedures. One is aimed at the construction of an 'installation classée' and the second is aimed at the operation of the facility.

**(b) Contents, procedures, provisions for consultation and the EIA process**

As explained earlier, the general provisions covering these aspects are contained in the law for the protection of nature and its decree for implementation. The law on "installations classées", the law on public enquiries and the law on "Instruction Mixte" complement the core text with regard to information, consultation and public participation procedures.

The law on the protection of nature and its implementation decree set out the principles that have to be respected:

- Scope
- Integration in the existing procedures;
- Provision for informing the public;
- Review procedures employed by the Ministry of the Environment.

Scope

Article 1 of the law of 10/7/76 stipulates that environmental considerations relate to:

- The protection of nature and natural landscape;
- Protection of fauna and flora;

- Preservation of biological balances;
- Protection of natural resources from any kind of damage;
- Preservation of a harmonious equilibrium between the population and their urban and rural milieu.

The decree sets out the general aspects covered in the EIA process and leaves it to 'arretés interministeriels' to set out more detailed contents of the 'étude d'impact' for particular categories of project. The minimum content of an EIS is set out as follows:

- A baseline study of the site and its environment including natural resources, natural agricultural areas, forests, water resources, and leisure sites affected by the project;
- A description and analysis of the effects on the environment including effects on sites and landscapes, fauna, flora, the natural milieu and its balance and, where relevant, impact on neighbourhoods' tranquillity (noise, vibration, odour, luminous emissions) and on hygiene and public salubrity;
- The reasons why, in view of environmental considerations, the particular alternative has been adopted among those studied;
- Measures envisaged by the developer or the applicant for suppressing, reducing and if possible compensating for the negative consequences on the environment.

Procedures, consultation and participation

General provisions contained in the law for the protection of nature. There are general provisions which apply to all EIAs by virtue of the law for the protection of nature. It is usually the responsibility of the developer or the applicant to undertake the EIA (see above). The EIA is integrated into existing procedures and the EIS or 'notice' (simplified procedure) is added to the other documents submitted, and should not alter the timescale of the planning process. With regard to information and consultation, the main provisions are contained in the decree implementing the law of 1976. There are two possible situations: the project does not require a public enquiry; the project does require a public enquiry.

i) Projects non submitted to public enquiry

In practice there are virtually no projects subject to EIA that do not require a public enquiry if the financial or technical threshold for that type of project is reached. However, there is a gap between the thresholds established by the law for the protection of nature and those established by the law on public enquiry (6 million francs as against 12 million francs). For projects falling between these figures, there is in theory no public enquiry except when there is compulsory purchase involved - in which case, the older law on public enquiry applies.

Therefore, for these relatively exceptional projects, the provisions for information, consultation and participation are those general ones contained in the law for the protection of nature. In this law, there is no specific provision for statutory consultees. However, any individual or association may have access to the EIS after the competent authority has decided to consider the project (if such a stage is required) or has authorised the project. If the procedure does not envisage any of these decisions (e.g. in the case of a competent authority being the developer) access to the EIS is granted as soon as the decision to implement the project is taken.

The decision to consider, authorise, approve or execute a project must be preceded by a public notice mentioning the existence of an EIS. Such a notice is made according to the particular regulatory framework relevant to the category of project. When such a framework does not exist the notice is advertised in the local papers; for projects of national importance, the notice is also announced in at least two national newspapers.

The request to consult the EIS must be addressed to the 'Prefet' of the relevant 'departement'. The Prefet then notifies the person making the request where the EIS is available and the period of consultation which cannot be less than 15 days. For projects undertaken for the Ministry of Defence, the application is addressed to the Minister for Defence who ensures that the notice is made in accordance with the necessity to preserve national security.

ii) Projects requiring a public enquiry

Projects subject to the law on public enquiries of 12/7/83 must comply with the procedures established by this law. This defines the public enquiry as a procedure whose aim is to inform the public and to register its advice, suggestions and counter-proposals, in order to provide the competent authority with all of the information it needs for its decision.

The law of 12/7/83 and the decree of 23/4/85 establish that applications for developments and works carried out by private or public developers which, by their nature, their scale or the characteristics of the sites concerned, are likely to affect the environment, must be submitted to a public enquiry and require an EIS. Works undertaken to prevent an immediate danger and repair and maintenance works are exempt from this procedure. The decree and its subsequent amendments establish a list of categories and the corresponding technical or financial thresholds. The 'installations classées' projects are only one of the categories listed in the decree.

The 'saisine facultative' This procedure confers power on the Environment Minister to 'call in' any proposal involving an EIS, at his own initiative or at the request of a third party (individual or group) and give his opinion on it. The environmental authorities can therefore intervene in a project which might have effects on the environment. However, their influence may be limited in view of the fact that they do not have the power to block a decision to authorise a project. Nevertheless, their dissuasive effect is not negligible.

Projects covered by the law on 'installations classées'. These projects are also subject to the law on public enquiries of 12/7/83 as well as to the law of 19/7/76 and the decree of 21/9/77.

The 'environmental public enquiry' is integrated into the existing procedure. When a project or operation falls into the category of an 'installation classée' requiring an authorization, the developer submits a complete dossier including an EIS to the Prefet. When the latter is satisfied that the application contains all the necessary legal documents, he transmits it to the President of the Administrative Tribunal who will then designate a 'commissaire enquéteur' (enquiry inspector). The duration of the enquiry is fixed by the Prefet as a period lasting not

less than a month, which can be prolonged by up to 15 days by the Inspector if this is necessary. The Inspector must ensure that the publicity legally required throughout the area concerned (which is regulated by the law) is provided and that public access to the document is achieved. The Inspector can also legally require from the developer any additional information that he thinks necessary.

The Inspector, with the consent of the Prefet, can also initiate a public meeting, the recommendations of which are transmitted to the developer who then has 22 days to respond. When the enquiry is completed, the Inspector submits a report which must reflect the main comments made by the public but which must also contain his own justified advice. This report, which must be submitted one month after the completion of the enquiry, is then formally published. The decision to authorise the project belongs to the Prefet. In making his decision, the Prefet must take into consideration the advice and comments contained in the application documents - he has the authority to reject the application and to impose any necessary protection conditions on the developer. A ministerial circular states that environmental considerations have priority over economic and social benefits.

In summary, the procedure is as follows:

- Application for authorization submitted to the 'Prefet du Departement';
- Designation of a 'commissaire enquéteur';
- Consultation with interested administration;
- Advice of the Municipal Council;
- Public enquiry, comments of interested parties;
- Report by the inspector of 'installation classées';
- Advice by the Departmental Council for Hygiene;
- Authorization and publicity;
- Appeal.

The documents submitted with the application consist of three main elements:

- An environmental impact statement;
- A report on accidental hazards;
- A report on conformity with hygiene and safety requirements.

The content of the EIS must conform to the law on the protection of nature and its implementation decree but must also include elements required by the law specific to the 'installations classées' which include:

- noise level of equipment;
- mode and condition of water consumption;
- means for the protection of the water table;
- water treatment methods;
- means of transport of input and output.

Simultaneous compliance with two decrees (those of 23/4/85 and 12/10/77) may seem complicated but has been recognised as legal by the administrative tribunals and by the Council of State.

Projects falling under the 'instruction mixte' procedure. The law of 29/11/52 on the 'instruction mixte' established a specific procedure for the authorization of certain types of projects, based on physical and financial thresholds. The categories concerned are the following

- Linear infrastructure (major roads, motorways, railway lines, canals);
- Energy production and transport facilities;
- Dams;
- Ports.

Thresholds for linear infrastructure vary from 100 million francs for national projects to 25 million francs for local projects and trigger specific planning procedures which include EIA. These thresholds do not invoke EIA for projects to which other legislative frameworks and

thresholds apply.

These projects necessarily involve either the central administration of the Ministry of the Environment or its local agencies, the 'Direction Régionale de l'Environnement' (DIREN) - formerly 'Delégation Regionale à l'Architecture et l'Environnement' (DRAE). The review by the administration is however of an advisory nature rather than of an enforceable nature. Nevertheless, for major projects, the advice has a strong influence.

(c) Degree of compliance with the requirements of Directive 85/337/EEC

i) Compliance with Articles 1, 2, 4

It is difficult to make a direct comparison between projects listed in Annex I and II of the Directive and the projects covered by the various laws and decrees relevant to environmental impact assessment, because the legislation often overlaps in terms of coverage and varies in stringency. A detailed analysis shows, however, that most categories listed in the Directive are covered, either through the main legislation or through specific frameworks which generally complete the law on the protection of nature. As a reminder, the main acts of legislation relating to EIA are:

- As core legislation, the law on the protection of nature 10/7/76 and decree 12/10/77.

- In addition, the law on 'installations classées' 19/7/76 for the protection of nature and the implementation decree of 21/9/77 establish a specific procedure for projects requiring authorisation.

- Finally, the law on public enquiries 12/7/83 and decree 23/4/85 is applicable to all EIAs over a specific threshold.

Certain categories of projects fall under specific regulations; these include:

- Decree 11/12/63, modified 27/3/73, covering nuclear installations.
- The mining code.
- Decree 20/12/79 concerning quarries.
- Decree 7/5/80 relating to the control of mining and quarrying operations.

Table 2 shows how the various types of project are dealt with under French law.

ii) Compliance with Article 5

The law for the protection of nature establishes the nature of the information which should be contained in an EIS. Article 2 of the law sets out the main elements which must be dealt with by the 'decret d'application'. The environmental impact statement should comprise as a minimum:

- a baseline study of the area involved including its environment;
- an analysis of the changes that would be generated by the project;
- the measures envisaged in order to suppress, reduce and if possible compensate for the damage done to the environment.

There is no specific mention of the items included in Annex III, Item 1 of the Directive, relating to the description of the project, the production process, nature and quantity of materials used, as well as the description of the expected residues and emissions in the main legislation but there are specific regulations for certain categories of projects. Item 3 of Annex III is only partially covered: information on material assets, including the architectural and archaeological heritage is not specifically mentioned, although this may possibly be covered by the law for the protection of historical monuments; however, this does not ensure that it is taken into consideration in the EIA process. In addition, the elements in Item 3 requiring the developer to describe the forecasting methods used to assess the effects on the environment are not covered. Items 6 and 7 of Annex III regarding the requirement of a non-technical summary and an indication of difficulties encountered by the developer are not covered by the law on the protection of nature.

## Table 2: Comparison of French legislation and provisions for compliance with the Directive

| Coverage | Regulations | Consultation | Informing the public |
|---|---|---|---|
| Annex I projects | | | |
| - Item 1 | Law PN, Decree EI, Law and Decree IC, Law and Decree EP | Yes | Yes |
| - Item 2 | Law PN, Decree EI, Law and Decree IC, Law and Decree EP, Law IM | Yes | Yes |
| - Item 3 | Law PN, Decree EI, Law and Decree IC, Law and Decree EP | Yes | Yes |
| - Item 4 | Law PN, Decree EI, Law and Decree IC, Law and Decree EP | Yes | Yes |
| - Item 5 | Law PN, Decree EI, Law and Decree IC, Law and Decree EP | Yes | Yes |
| - Item 6 | Law PN, Decree EI, Law and Decree IC, Law and Decree EP | Yes | Yes |
| - Item 7 | Law PN, Decree EI > 6MF, Law IM when > 25MF, Local or 100 MF for national projects, Law EP when > 12MF | Yes when covered by IM | Yes when > 12MF |
| - Item 8 | Law PN and Decree EI when > 6MF, EP when > 12MF | Yes when > 12MF | Yes when > 12MF |
| - Item 9 | Law PN and Decree EI, Law and Decree IC, Law EP > 12MF | Yes | Yes |
| Annex II projects | | | |
| - Item 1 | | | |
| (a) | Law PN and Decree EI | No statutory, except DIREN | Yes |
| (b) | Not covered | No statutory | No |
| (c) | Law PN and Decree EI when > 6MF | No statutory | Yes |
| (d) | Law PN and Decree EI | No statutory | When decision is made |
| (e), (f), (g) | Law PN and Decree EI, Law and Decree IC | Yes | Yes |
| (h) | Law PN and Decree EI when > 6MF, EP > 12MF | Yes | Yes |

continued

## Table 2: continued

| Coverage | Regulations | Consultation | Informing the public |
|---|---|---|---|
| - Item 2 | | | |
| (a) - (j) | Law PN and Decree EI, M or C depending on whether it is classified as mine or quarry | Yes | Yes |
| (k) - (m) | Law PN and Decree EI, Law and Decree IC, Law EP when > 12MF | Yes | Yes |
| - Item 3 | | | |
| (a) | Law PN and Decree EI, IM, Law and Decree IC, Law EP when > 12MF | Yes | Yes |
| (b) | Law PN and Decree EI when > 6MF | No statutory except DIREN | When decision is made |
| (c) | Law PN and Decree EI, Law and Decree IC, Law EP when > 12MF | Yes | Yes |
| (d) - (j) | Law PN and Decree EI, Law and Decree IC, Law EP when > 12MF, IM when > threshold | Yes | Yes |
| - Item 4} | | | |
| - Item 5} | | | |
| - Item 6} | Law PN and Decree EI | Yes | Yes |
| - Item 7} | Law and Decree IC | | |
| - Item 8} | Law EP when > 12MF | | |
| - Item 9} | | | |
| - Item 10 | | | |
| (a) - (c) | Law PN and Decree EI, EP > 12MF | No statutory except DIREN | Yes |
| (d) - (j) | Law PN and Decree EI, IM depending on thresholds, EP > 12MF | Yes | Yes |
| - Item 11 | | | |
| (a), (b), (d) | Law PN and Decree EI | No statutory except DIREN | Yes |
| (c), (e) - (j) | Law PN and Decree EI, Law and Decree IC, Law EP | Yes | Yes |
| - Item 12 | Law PN and Decree EI when > 6MF, EP | No statutory except DIREN | Yes |

Abbreviations

Law PN and Decree EI - Law "Protection de la Nature" and Decree "Etudes d'impact"
Law and Decree IC - Law and Decree "Installations Classées
Law and Decree EP - Law and Decree "Enquete Publique"
IM - "Instruction Mixte"
M - Code des Mines
C - Codes des Carrières
DIREN - Direction Régionale de l'Environnement

However, the law on 'installations classées' and the various sectoral decrees are more detailed and stringent and wholly cover Items 1, 2, 3, 4 and 5 of Annex III of the Directive. The minimum requirements specified in Article 5(2) of the Directive are only covered when the project is an 'installation classée'. The non-technical summary, however, is not covered at all. It is perhaps also necessary to point out that the decree implementing the law on the protection of nature specifies that 'the content of the EIS must be in relation with the scale of the project and the extent of its effects on the environment'.

The 'Instruction Mixte' procedure (interministerial procedure involving the Ministry of the Environment) triggered for large projects goes beyond the minimum required by the 1976 law. However, smaller projects which are left to the standard procedure may not fulfil all the content requirements, particularly since the financial thresholds are very low and inflation since 1976 has further eroded these.

The requirement for the competent authority (Article 5(3)) to make relevant information available to the developer is not explicitly specified in the various legislation covering EIA but it is part of the general mission of the administration to provide such information. In practice, the DIREN is consulted and has at its disposal information either in the form of cartography or of databases. The requirement for designated authorities to receive the information pursuant to Article 5 and to give their advice before a decision is finalised on the project does not appear to be fulfilled for those projects which fall under the standard EIA process. There is no general provision stipulating that lists of interested authorities or organisations should be established for the different categories of projects and environmental impacts. However, certain categories of projects falling under specific procedures, e.g. "l'instruction mixte" do require such consultations.

iii) Compliance with Article 6

With regard to public consultation, there are two cases:

(a) When the project is subjected to an 'environmental public enquiry', the public has the opportunity to express its opinion before the project is initiated, and even before a decision is taken.

(b) When the project is not subject to public enquiry, the public has the opportunity to express its opinion either at the date of consideration, decision, or execution of the project, depending on the procedure involved for that particular project.

The detailed arrangements for publicity and consultation appear to comply with the requirements of Article 6(3) of the Directive.

iv) Compliance with Article 7

At present, French legislation does not specifically require the authorities to forward information to other Member States in cases of transborder impact. However, a decree is being prepared which will correct this gap.

v) Compliance with Article 8

As explained earlier, the competent authority must take the advice and comments contained in the documents submitted into account in making its decision. However, the legal provision to do this exists only for 'installations classées' (where an inspectorate can check that binding prescriptions are met).

vi) Compliance with Article 9

There are no provisions specific to EIA requiring the competent authority to inform the public of the content of the decisions or the justification of its decision. However, the decision for statutory authorisations must be made public either by "extrait" or in the official bulletin of the Departement. In addition, the general law on 'Liberté d'Information', whereby the public is guaranteed access to public documents, applies to EIA and allows access to relevant information.

vii) Compliance with Article 10

Under the law on 'installations classées' the developer is required to transmit all the information at his disposal on the project to the 'commissaire enquéteur' and to the competent authority. Protection of industrial and commercial secrecy is guaranteed under the normal requirements of confidentiality that govern the relationship between the administration and the public.

viii) Compliance with Article 13

The combination of the provisions laid down in the law on 'installations classées' and the law on public enquiries provides, in many aspects, stricter rules and procedures than those contained in the Directive. Most of the apparent gaps which exist between French EIA legislation and the Directive are due more to wording than to substance. This can be explained by the following factors:

- The French law precedes the Directive;
- The EIA process is integrated into much wider planning frameworks in France;
- The apparent resistance to separate the concept of EIA from other planning tools and other environmental protection laws.

In practical terms, it seems difficult, without substantial changes to a great deal of legislation, to comply with the precise wording of the provisions contained in the Directive, since each operation or category of operations is governed by a different legal text, to which EIA provisions have been added.

However, a number of regulations are being prepared which will fill the gaps that have been observed:

- A decree will make a non-technical summary mandatory in the EIS, and will require the competent authorities to inform other Member States of the likely transnational impact of a project.

- A ministerial 'arreté' (order) is also being prepared, which will specify the information required in an EIS, in compliance with Annex III of the Directive.

- A national commission for the environment (which will deal with all environmental issues including EIA) is being set up, which will be independent and have a clear role. (The Ministry of the Environment's role is mostly that of a mediator, whilst the 'College', as it is apparently going to be named, will have an advisory role to the Minister, particularly on plans, programmes and policies.)

- The draft decree also brings the provisions concerning competent authorities into line with the law on decentralisation. The decisions on projects requiring EIA will not exclusively concern the Prefet any more, but can also be the prerogative of the Maire of a Commune or the Président du Conseil Général of a departement.

- A modification to the 'Saisine' procedure is being considered which will strengthen its status and influence.

- Finally, a few changes are being considered in the longer term. These include the setting up of inspectorates similar to those existing for the 'installations classées' for the monitoring of EIS predictions.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

### (a) Outline of criteria/thresholds

As explained above, most Annex II projects, which in France fall under the 'installations classées' law, require an EIS regardless of their cost or physical dimensions. Other projects, which do not fall under the 'installations classées' law, require an EIS because of their dimensions or cost. These are:

- Allotments and construction > 3000m², in a municipality without a land-use plan (POS).
- Overhead energy transmission > 225kV.
- The following categories exceeding 6 million francs:
  - Gas transport equipment
  - Roads and motorways
  - Railway lines
  - Canals and other works on waterways, private or public
  - Works on and development of sea and river ports.

(b) Comment on criteria/thresholds

The 6 million francs threshold appears to be too low in today's economic conditions. However, it is not, as is widely believed, the main reason for the very large number of EISs undertaken in France each year. The main reason for the 5000-6000 EISs per annum, is the law on 'installations classées' which generates more than 2000 EISs each year (below). Nevertheless, a higher threshold, possibly 12 million francs, is being envisaged for the near future, which will probably eliminate about 500-700 EISs each year.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

(a) Number and categories of EISs

Since the implementation of the law on EIA in 1978, about 5000-6000 EISs have been undertaken each year. Of this number, two thirds were carried out by private developers against one third by public developers. The sectoral distribution is as follows:

- 2000 statements relating to industrial developments, most of them falling under the law on 'installations classées';
- 1000-5000 statements relating to agricultural developments, chiefly land reclamation and land restructuring operations;

- 500 statements relating to quarries;
- 300 statements relating to transport infrastructure, mainly roads, motorways and railway lines;
- 100 statements relating to energy transport and production facilities such as overhead lines, nuclear power stations, conventional power stations, hydro-electric power stations, etc.;
- 200-300 statements relating to urban development projects;
- 100 statements relating to waste disposal and water treatment projects;
- 40-50 statements relating to tourism projects.

No breakdown of these figures between Annex I and Annex II projects has been attempted but a broad cross-examination seems to indicate that approximately 200 projects belong to Annex I, with the vast majority of projects falling under Annex II.

The average number of projects under the 'instruction mixte' procedure is about 50 per annum, including national and local level projects. The number of 'notices d'impact' carried out each year is even greater; although it has not been possible to collect global figures. An extrapolation of regional figures suggests that there may be as many as twice the number of EISs.

**(b) Implementation of the different EIA procedures in practice**

It is apparent that EISs for large scale projects are more comprehensive and more informed than for smaller projects. This is particularly true for energy, motorways and railway lines. Good relationships between the developers and the environmental administrations at national (Ministry) and at local level (DIREN) favour better scoping and more serious consideration of environmental impacts for large projects. EISs for public development projects tend to be more informative than for private developers' projects which are very often limited by scarce resources. The latter EISs usually contain the minimum information legally required and are undertaken in-house.

A large number of categories of projects are governed by specific regulations which are

generally stricter than the standard regulations.

There are considerable variations in the approaches and commitments to EIA within the public administrations and amongst developers. Some developers, thanks to the new generation of young and 'greener' engineers and to the influence of dedicated 'greens', produce more accurate and more detailed information. Where such personnel do not exist, the information provided tends to be formal and minimal.

For large scale and national projects, alternatives are generally considered in the planning process. However, very often, the approach adopted consists of gradually improving the initial option rather than considering different alternatives properly.

The degree and nature of public consultation and participation is very dependent on the scale and nature of the project, the location of the project and the environmental awareness and sensitivity to environment matters of those involved in the project.

Projects which are subject to public enquiry are generally better dealt with, if only because the public enquiry follows stricter procedures and is managed by the 'commissaire enquêteur'. However, many people are critical of the limited resources and often limited expertise of the 'commissaires'. The 'installations classées' procedure also enables the competent authorities to impose all the conditions which are deemed necessary for the protection of the environment. They have the power to reject the application from a developer or impose the necessary changes. Here again, in practice, there are wide variations in the extent to which the competent authority takes into account the comments, observations and advice from the 'commissaire enquêteur' and from the public.

The competent authorities' deterrent of refusing authorization is generally an effective weapon which puts pressure on the developers to comply with the procedures and to produce a reasonable EIS. In most cases, the powers given to the competent authorities help them ensure, if they are committed not only in the letter but to the spirit of EIA, that the developer takes the

study seriously and introduces the necessary changes generated by public consultation. It is, however, difficult to assess the degree of influence of the EIA on the decision-making process, as compared with other procedures and regulations.

Given the large number of EIAs undertaken each year, and that no comprehensive evaluation has been carried out, it is difficult to assess how satisfactorily the Directive's provisions are being implemented. However, the discussions and interviews carried out in preparing this report give some valuable indications.

Judging from the number of court cases which have dealt with the content of the EIS, there are significant numbers of EISs which do not contain all the required information. In most cases, the deficiencies relate to absence of analysis of a particular major type of impact (for instance, absence of a hydrobiological analysis in a river gravel excavation project), to underestimation of negative impacts (e.g. in an uranium mine project) or to lack of options or alternatives (e.g. in a housing estate project). The extent of the deficiencies may, however, be more serious than that indicated by the number of court cases, as in many local situations, awareness and resistance from the public may not always be very high, and the competent authorities may not consider environmental issues as a priority.

The majority of EISs are undertaken by consultants. In general, they tend to establish a good working relationship with the authorities involved and they have access to available information. This was clearly confirmed by the several consultants who were interviewed during the preparation of this annex.

Although in theory it is possible to consult an EIS once it is submitted (there are appropriate provisions in the regulations), in practice, it does not appear to be as accessible as it should be. The consultants will not make an EIS available without the authorization of the developer, and the developer is generally reluctant to put the EIS at the disposal of the public. In practical terms, the competent authorities are the only source available for consultation of EISs but lack flexibility because it is generally not a policy to duplicate or sell the EISs.

The designated environmental authorities (mainly the Ministry of Environment and its branches at local levels, the DIREN), appear to be consulted fairly fully for major projects. In many cases, however, consultation seems to be limited to sending circulars and memoranda. In the case of projects submitted to public enquiry, consultation of the public seems to be working satisfactorily. For other projects, it has already been indicated that the possibility of consultation comes too late in the process.

According to the discussions held with various parties involved in EIA, there are not many rejections of projects on the grounds of a poor EIS or significant negative impacts; approximately 10 cases each year (of 5-6000). However, in the course of the assessment and the consultation phase for major projects, it is generally a rule that the projects are modified, either under the pressure of the competent authorities or the public, or simply as a result of the analysis of the impacts of the project. On the other hand, it has emerged from discussions that, for a large number of (smaller) projects, the scope for modification is practically nil because EIA comes too late in the design process.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO FRENCH LEGISLATION AND PRACTICE

The EEC Directive itself has no legal status in France. The only legal EIA provisions in France are those contained in the various laws that were examined in the first three sections of this report.

### (a) Measures to monitor implementation of Directive

There are no monitoring provisions. There has been one study of EIA in France, commissioned by the Ministry of the Environment (Atelier Central, 1990).

### (b) Provision for scoping

There are no mandatory provisions for formal and systematic scoping ('cahier des charges'). However, in practice, as indicated by several environmental consultants and by

DIREN officials, some form of scoping is inevitably carried out during the initial informal consultation process between the developer, the consultants undertaking the EIA, and the various administrations. Furthermore, the 'instruction mixte' procedure also offers opportunities for scoping since it statutorily brings the environmental authorities into the consultation process.

(c) Quality of EISs

It is difficult to make a precise evaluation of the quality of EISs. However, it can be said that there are large variations. Generally, large and national project EISs are of better quality than smaller project EISs. Some sectors and some areas are more sensitive than others and therefore produce more contention and controversy which in turn lead to better EISs. For example, it appears that EISs of energy and important linear projects are generally of better quality than most. EISs for public projects are generally undertaken by independent consultants and have a specific budget. Their standard is generally recognised to be satisfactory. EISs for projects prepared by small private developers (which represent the majority: 70% of projects) are generally recognised to be of poor standard. Such developers have limited resources and undertake EIAs in-house, using Ministry guidance documents.

However, there has not been any systematic and scientific assessment of the EIA experience so far apart from a partial review at regional level (the Nord-Pas de Calais-10 years EIA experience). This study focused on the attitudes of those concerned with the EIA process: administrations and developers, independent consultants and environmental associations.

- Administrators and developers: 50% of those surveyed considered the EIS as an information tool. 90% considered it as information for the public, and 45% as information for the administration. Only 35% consider it as a legal obligation.

- Independent consultants: most of those surveyed considered EIA as a planning tool destined to inform the public and to 'polish' the image of the developer. 30% saw it as a consultation tool for reducing the negative impacts of projects. Some of them saw it as a pedagogical instrument intended to enhance environmental awareness and respect of

the public interest against individual or corporate interests.

- Associations: a quarter of those surveyed indicated that they were consulted fairly regularly for projects requiring EIA. Many of them felt that, in general, the quality is poor and the mitigating measures insufficient. Most of them expressed the hope that EIA will evolve, take place at the earliest possible stage, and that the thresholds would vary with the receptor environment. Finally, the majority expressed the view that the responsibility for EIA should be transferred to an independent body, instead of being the responsibility of the developer.

**(d) Provision for formal review of adequacy and quality of EISs**

There are three main types of control in the EIA process: legal control, environmental control and technical control.

- The administrative tribunals and the Conseil d'Etat may be called to intervene in litigation on the rules of procedure, the field of application and on the content of the EIS.

- The environmental authorities (Ministry and regional bodies) exert some control but given the number of EISs carried out each year, they cannot realistically manage effective control on all EISs. Priority is given to projects regulated by the 'instruction mixte' procedure and projects which have triggered the 'saisine facultative' procedure (above).

- The technical authorities at 'Departement' and 'Région' levels are effectively responsible for the handling of the project before its authorization, as EIA has been integrated into existing administrative procedures.

The French government has not made legal provision for the formal review of the quality of EISs. However, compliance with the regulations in terms of procedures and content is monitored by the technical authorities, the environmental authorities and the administrative tribunals. Generally, this control has concerned itself with formal aspects rather than with

substance. If the letter of the regulations is not complied with, the project is generally not authorised.

(e) Provision for monitoring and post-auditing

There are two situations: 'installations classées' and other specifically regulated sectors (water and mining projects, for instance); and other projects.

- In the case of 'installations classées', mining projects and water projects, there are binding prescriptions and the relevant inspectorates exert control on the installation and see that it has been constructed and is operating in compliance with the terms of the authorization.

- In all other cases, the EIS has no binding status. It is a document for informing the decision process and does not bind the developer.

(f) Assistance to practitioners

It is quite clear that a lot of effort was taken by the central environmental administration to produce advice, guidance, methodological and training materials, particularly in the early stages of the implementation of the regulations. In particular, a substantial effort has been made by the 'Ecole des Ponts et Chaussées' and the 'Génie Rural, des Eaux et des Forêts'. However, the number of seminars, conferences and other training programmes has declined significantly compared with the early phase. Effort now seems to focus on specific sectors and projects, on developing techniques to deal with specific studies rather than on EIA as a whole. The universities and the Atelier Central de l'Environnement play a major role in this new approach.

Guidance and technical documents have been prepared for sewage projects, quarries, waste disposal, dunes, erosion, forests, industrial establishments, roads and highways, rivers, tourism, urban planning and humid areas. A general document on EIA and public enquiries has also been produced (see References).

(g) Effect on timescale, costs, etc.

In theory, the regulations expressly stipulate that EIA should not prolong the timescale of the planning process. However, there are indications that when EIA has not been integrated into the planning process from the outset, it has prolonged the timescale. With regard to cost, the figures generally quoted by independent environmental consultants spread between 5 and 10% of the total costs of project design and documentation (not of implementation costs).

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

### (a) Provisions already made

Annex I projects are all covered by the law on protection of nature and all of these, except those contained in categories 7 and 8, must also comply with the law on "installations classées".

Most Annex II projects are also covered under the 'installation classées' legislative framework. Certain categories which are not covered in the latter (agricultural projects and projects which fall under 'others' in the Directive) are covered through the law on the protection of nature even though this coverage only extends to those projects exceeding 6 million francs.

Some categories are exempted in the French legislation: 'Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes.' This does not comply with the Directive. French legislation also exempts oyster and other salmon breeding whilst the Directive requires an EIA for these projects. However, these establishments do require an authorization and thus an EIA under that procedure. All other exemptions that fall under Annex II of the Directive are conditioned by the 6 million francs threshold.

The content of the environmental impact statement in France does not fully comply with the requirements of the Directive. Impacts on human beings, and on material assets and cultural heritage, are not specifically included, although the law on the protection of historical

monuments covers the latter, but not within the EIA process. On the other hand, impacts on the ecological balance are included. The French legislation does not require the developer, as specified in the Directive, to explain the methods used for predicting the impacts on the environment. Nor does it require the developer to identify the difficulties encountered in compiling and analyzing the data in an EIA.

The item 'description of the project' is included for 'installations classées' but not for the other projects requiring EIA. However, all planning applications require a description of the project so that, in practice, this item is always covered but not necessarily in the EIS documentation. The non-technical summary is not a requirement in French legislation: this does not comply with the Directive.

French EIA legislation does not expressly require the authorities which are in possession of data to communicate it to the developer, as required in the Directive, but information and participation are guarantied by in the public enquiry law which applies to most projects. In addition, the French law on freedom of information implicitly puts the responsibility on the applicant to ask for the information available. Information and participation of the public, as required by the Directive, is a requirement for most projects within the framework of the law on public enquiry. Furthermore, the "installations classées" and "instruction mixte" projects follow an even more stringent procedure.

French legislation does not cover the Directive's requirement that in the case of a significant environmental impact on another Member State, the relevant authorities must inform and consult the other Member State.

The changes which are envisaged will bring French legal provisions in line with the minimum requirements of the Directive. In many aspects however, legal provisions go well beyond the minimum requirements, at least in theory. In general, the developers and their consultants tend to comply with the legal requirements. In some cases, this is done very formally, in others, these provisions give the opportunity to work out better projects in terms of

environmental protection. In any case, much depends on local circumstances, on how the legal provisions are used and on how the information produced by the process is used. In some cases, it can be used as an additional weapon (to block a project for instance); in other cases, it results in an improvement in the project; and in other cases, it is quite neutral.

(b) Ambiguities in the Directive

For many outside observers, and indeed for a number of French practitioners, the French system seems to be too complicated, sometimes confusing and at the very least, needs to be homogenised. The large number of cases dealt with by the administrative tribunals is cited as evidence of this view. However, there are also other views which suggest that if an EIA system is to be practical and effective, it should allow for different levels of assessments. A standardised EIS for all types and sizes of projects, it is argued, would often unnecessarily burden developers whose projects do not have significant impacts on the environment, whilst other projects with more environmental consequences, and which should require a different approach, would be cleared in the same way.

Many in France hold the view that although, in theory, the public has the right of access to EISs, in practice, the system is not very satisfactory; the information should be made more easily accessible. It is also widely believed that public consultation and information takes place too late in the planning process.

An increasingly widespread view is that the limitations and difficulties of implementing EIA as it stands derive from the status of the EIS and from the fact that the developer is responsible for undertaking it. The French approach and the EEC approach have apparently rejected the use of coercion in project approval resulting from giving the responsibility for EIA to an environmental administration. The approach chosen relies heavily on the goodwill and the environmental awareness of the developer, the competent authorities and the public. This approach is undoubtedly more participative but may require time and evolution in attitudes and involvement.

to an environmental administration. The approach chosen relies heavily on the goodwill and the environmental awareness of the developer, the competent authorities and the public. This approach is undoubtedly more participative but may require time and evolution in attitudes and involvement.

(c) Recommendations for more satisfactory, cost-effective, compliance in France

The law on public enquiries which applies to most projects formally guarantees information and participation of the public but it could be more effective if it occured earlier in the planning process.

- It seems that a list of statutory consultees for each category of projects could be added to the existing regulations without great difficulty. Furthermore, this should not affect the time required for the decision-making process, or its cost.

- For projects which are not covered by the law on 'installations classées' and the law on 'enquête publique', provisions allowing the public to be informed and to express its opinion before any decision is made could be made without great difficulty. This is even more important as the French are envisaging extending the present procedures for 'installations classées' to other categories of projects.

- It should be made easier for the public to have access to the EIS, either by making it available for sale or by consulting it without having to go through all the red tape experienced at present.

- The requirements of an EIS which are in compliance with the Directive for 'installations classées' could be easily extended to all projects submitted to EIA by completing the list of contents of the law on the protection of nature with the item 'description of the project'.

## REFERENCES

Atelier Central de l'Environnement (1990) Environmental Impact Assessment: the French Experience A.C.E., Paris.

Comité Législatif d'Information Ecologique (1987) Les Installations Classées Mode d'Emploi: Guide Pratique à l'Usage des Associations Comité Législatif d'Information Ecologique, Paris.

Ministère de l'Environnement (1991) Le Guide de la Nouvelle Enquête Publique Ministère de l'Environnement, Paris January 1991.

Ministère de l'Environnement et du Cadre de Vie (1980) Cahiers Techniques de la Délégation à la Qualité de la Vie, Etudes d'Impact sur l'Environnement: Guide des Procédures Administratives et Recueil des Textes d'Application Ministère de l'Environnement et du Cadre de Vie, Paris, December 1980.

## APPENDIX

### Projects subject to EIA in France

(a) Subject to EIA regardless of their financial cost, or technical dimensions, the works and project developments listed below:

- Mining projects.
- Underground storage of hydrocarbon gas or chemicals.
- Projects classified as 'installations classées' and requiring authorization.
- Nuclear power stations.
- Surface water storage facilities.
- Z.A.C. (zone d'amenagement concertée) development areas.

  Development in a forest zone involving more than 10% of the zone as defined in the land-use plan.
- Land clearing for urbanisation, industrial development or mining.
- Rural land regrouping or restructuring.

(b) Subject to EIA if the specified technical threshold are exceeded

- Overhead energy transmission > 225kV.

- Hydro-electric power plants > 500 KW.
- Camping sites > 200 units.
- Waste treatment facilities > 10,000 people.

  Projects requiring planning permission in municipalities not equipped with a POS development plan) > 3000 $m^2$.
- Housing estates in municipalities not equipped with a development plan > 3000 $m^2$.

(c) Subject to EIA if costs are equal to or exceed 6 million francs

- Airports.
- Roads and motorways.
- Railway lines.
- Overhead transmission systems.
- Power plants.
- Gas and oil pipelines.
- Chemical transport facilities.
- Water distribution and supply.
- Sea ports and river ports.
- Canals and other works on rivers.
- Harbour facilities and equipment.
- Ski resort facilities.

(d) Regardless of their financial costs, the following categories of projects are exempted from EIA

- Maintenance and repair works of all categories.
- Underground power lines and railway electrification.
- Domestic main gas and energy distribution, installation, and modernisation.
- Mineral exploration requiring authorization.
- Hydro-electric generation not exceeding 500 KW.
- 'Installations classées' requiring a 'declaration'.
- Underground and semi-underground water storage facilities.

- All projects aimed at increasing safety and which involve modifications of certain natural landscapes (rivers, mountains, dune stabilisation).
- Land clearing not covered by the code for forestry.
- Telecommunications installations excluding cables and conductors.

**Principal legislation**

- Loi No. 76-629-10/7/76 sur la protection de la nature
- Loi No. 76-663-19/7/76 protection de la nature, 'Installations Classées'
- Decret No. 77-1133 21/9/77 sur les 'Installations Classées'
- Decret d'application de la loi sur la protection de la nature No. 77-1134 21/9/77
- Decret d'application No. 77-1141 12/10/77 de la loi sur la protection de la nature
- Loi du 12/7/83 sur les enquêtes publiques
- Decret No. 85-453 23/4/85, application de la loi du 12/7/83
- Loi du 29/11/52 sur 'l'Instruction Mixte'

**List of those consulted during the preparation of this annex**

Mr. Charles Lilin: Atelier Central de l'Environnement

Mr. J.P. Darieutort: Atelier Central de l'Environnement

Ms. Monique Turlin: Atelier Central de l'Environnement

Mr. Falque: Consultant

Mr. X. Monbailliu: Consultant

Mr. J.L. Chemin: Directeur General, Organisation et Environnement

Mr. S. Mesonier: Directeur Adjoint, Departement Industrie, Organisation et Environnement

Ms. I. Lasternas: Organisation et Environnement

Ms. V. Lollichon: Organisation et Environnement

Mr. Delarue: President de "SOS Environnement"

# ANNEX FOR GERMANY

## INTRODUCTION

The annex for Germany has been prepared using a variety of sources of information. These have included consultation (written and/or verbal) with the Federal Ministry of the Environment, Nature Conservation and Nuclear Safety, the ministries with environmental responsibilities in each of the Länder, various local authorities, a number of industrial organisations and environmental associations, and various university specialists and other experts. The assistance received has been considerable and is very gratefully acknowledged. A list of those contacted and of the other sources consulted appears in the appendix at the end of this country review.

It is the purpose of this study, to present the reader with an overview of the Implementation of the Guideline into the German legal system. The main opinions on the subject have been reviewed and are being presented in this paper. Not surprisingly there are still major differences in opinion on some questions on the implementation. To provide the Commission and the European Parliament with a better understanding of the EIA development in Germany, not only the "official" viewpoint has been presented but other arguments, too, as long as they are based on serious considerations. Because of those controversies, the answers to some of the questions represent the weighted or balanced judgement of the author to the best of his knowledge. Inevitably, therefore, the judgement presented on each issue is not necessarily shared by all of those who were consulted.

## 1. EXTENT OF FORMAL COMPLIANCE BY GERMANY WITH THE REQUIREMENTS OF THE DIRECTIVE

### Background information

An adequate review of the implementation of the EIA Directive into German law requires some comment upon the preceding discussion in Germany about the best way to achieve this and upon the basic characteristics of the German environmental legal system.

In 1983, the German Parliament (Deutscher Bundestag) unanimously passed a resolution concerning the draft for the EEC Directive and by doing this made the principal decisions about its implementation:

- The Directive was supposed to be transformed as far as possible into the existing German legal system; there would be no additional bureaucratic procedures or new administrations created;
- The already existing environmental standards in Germany should not be lowered;
- The transformation into German law should be optimal.

Following this decision, the implementation of the EEC Directive in Germany followed the principle of making it a component part of already existing sectoral procedures. Accordingly, two more or less conflicting models have been merged. The model of the EEC Directive is characterized by:

- integrated cross-media pollution controls;
- comprehensive centralized consent procedures;
- broad mandatory public participation.

The German administrative legal system is characterized by:

- media-oriented pollution controls;
- sectoral and decentralized consent procedures under the responsibility of the states;
- limited mandatory public participation, but extensive judicial controls.

Three basic models for implementation were discussed:

- No legal changes, simply interpretation of existing legal requirements in the light of the Directive;
- Implementation by Statutory Ordinance only;
- Implementation through a separate EIA Act.

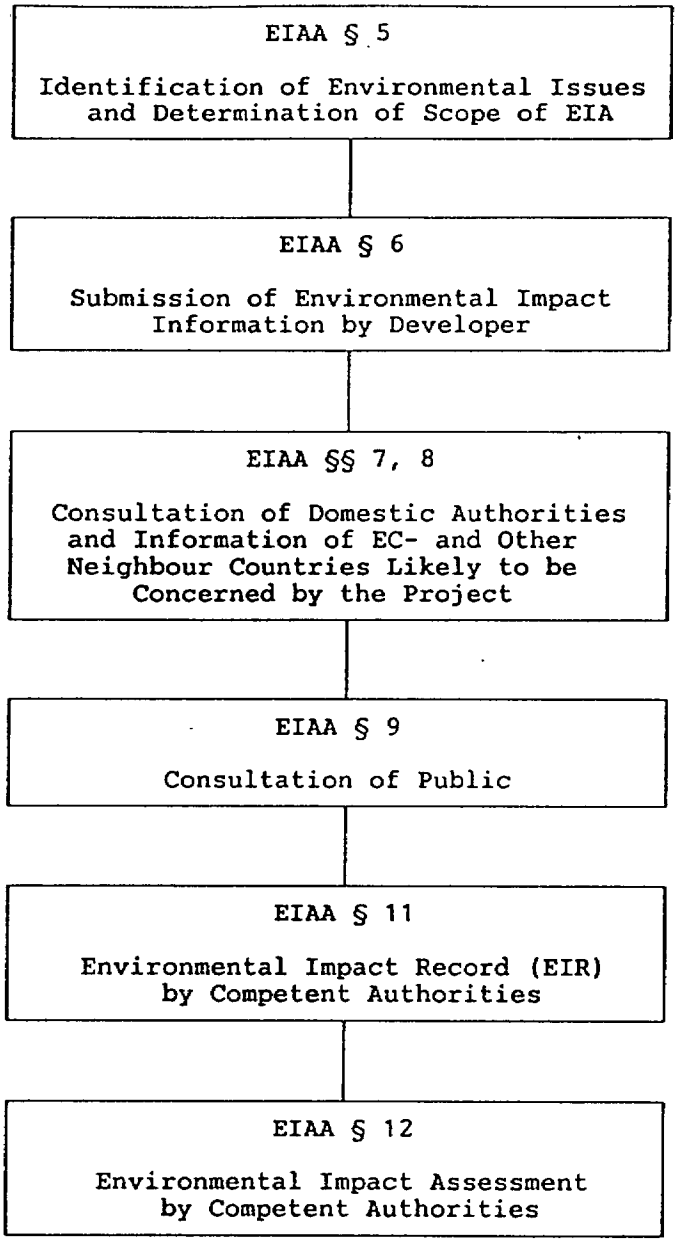
In 1987, the Council of Environmental Advisors published their opinion (Translation of the EEC Guidelines on the Environmental Impact Assessment into national law, the Council's Opinion). In this statement, the Council called for the implementation by an EIA Act. In its view, only a formal act of Parliament could accommodate the Directive's comprehensive approach.

In its formal structure, the EIA Act (EIAA) is grouped into three parts. The first part - the EIA act proper - contains the minimum requirements for carrying out an EIA and gives primacy to federal and state acts, in so far as they contain more detailed or more far-reaching provisions. In this way, the Act sets a minimum procedural standard for all consent procedures. The second part of the implementation act contains the necessary changes to the relevant sectoral acts. The third part provides for the coming into force of the Act.

Even though the German Parliament had decided on the means of implementation in 1983, there have been voices demanding to make the EIA a more or less separate procedure to make it more independent of the existing consent procedure and to give it more influence. The prevailing view, however, is that more influence is to be gained through the concept of integration. An independent EIA procedure could have been more or less powerless and without much influence on the sectoral consent procedures. By integrating the EIA, the short-comings and structural deficiencies of the existing environmental legal system may become more obvious. This could lead to very far-reaching structural changes of the German administrative and legal system for environmental protection. The integration gives EIA the power, to define the statutory language, to more or less lead to a new interpretation of existing laws. Following this reasoning, for which there are good arguments, one should bear in mind that the Council, in its opinion, made a strong case for a more comprehensive EIA Act at a "second stage". Based on the experiences with the EIA Act, as it stands now, the Council argued for further development of the existing legal framework for environmental protection. In a recent, published study of a draft for a Federal environmental code the options for such a development have been documented.

Following the flowchart "Procedural Steps of Environmental Impact Assessment" (EIA) Pursuant to the Environmental Impact Assessment Act (EIAA)" (see Figure 1) it becomes obvious, that the concept of integration is accompanied by some structural deficiencies. According to section 11 the competent authority summarizes the environmental impacts of the planned project, but there is no comprehensive environmental statement, no separate document. The public will not be able to comment on an environmental document. According to section 14 if a project has to be approved by several authorities the assessment of the environmental effects is carried out by the various competent authorities. There is no single competent authority, and in some cases reaching a decision may prove to be very complicated. The study of a draft for the environmental code points out these deficiencies and proposes a separate EIA document including the assessment. The draft of this document is supposed to go to a separate EIA expert agency that prepares a statement on the adequacy of the

Figure 1: Procedural steps of environmental impact assessment (EIA) pursuant to the Environmental Impact Assessment Implementation Act (EIAA)




**Source:** Bohne, E. (1989) Transforming the EC Directive of 27 June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment into German Law.

document. Additionally, it suggests, there should be a lead agency with the task of assessing the environmental effects.

Some of the criticism directed at the EIA Act, especially that voiced by environmental protection associations and by the academic sector, stems from a more general attitude that the existing environmental legislation is too soft and lopsided in favour of development and nature consumption. So, in some cases even well founded arguments against this way of implementing the EIA Directive into German law are to a certain extent motivated by the intent to move the whole system into a more "ecologically oriented" direction. On the other hand, it has to be kept in mind, that the existing EIA Act has also been criticized by business and industry as being too far reaching and putting too much additional burden on consent procedures.

Whether the optimistic view of structural changes induced by the EIA Act really comes true or not can only be tested by practice.

**(a) Principal legal provisions**

The principal legal provisions to date are:

- 1. Gesetz zur Umsetzung der Richtlinie des Rates vom 27.06.1985 über die Umweltverträglichkeitsprüfung bei bestimmten öffentlichen und privaten Projekten (85/337/EWG) vom 12.02.1990. (Act on the implementation of the Council Directive of 27 June 1985 on the Assessment of the Effects of certain Public and Private Projects on the Environment (85/337/EEC) of 12 February 1990.) The Act comprises the Act on the Assessment of Environmental Impacts of 12 February 1990 according to article 1 of the EIA Implementation Act, and subsequent changes to eleven Federal acts according to articles 2 - 12 of the EIA Implementation Act.

- 2. Änderungsgesetz zum Bundesberggesetz vom 12.02.1990 und Verordnung über die Umweltverträglichkeitsprüfung bergbaulicher Vorhaben vom 12.07.1990. (Amendment to the Federal Mining Act of 12 February 1990 and Statutory Ordinance for Environmental Impact Assessment for Mining Projects of 12 July 1990.)

- 3. Gesetz zur Änderung des Raumordnungsgesetzes vom 11.07.1989 und Raumordnungsverordnung vom 13.12.1990. (Amendment to the Federal Land-Use Planning Act of 11 July 1989 and Statutory Ordinance to the Federal Land-Use Planning Act of 13 December 1990.)

The following provisions required by law had still to be adopted (at July 1991[2]):

- Rechtsverordnung nach §10, Absatz 10 des Bundesimmissionsschutzgesetzes (Statutory Ordinance according to § 10, Subsection 10 of the Federal Immission Control Law), is expected to be adopted soon.

- Rechtsverordnung nach §7, Absatz 4, Satz 3 und §7a, Absatz 2 des Atomgesetzes (Statutory Ordinance according to §7, Subsection 4, Sentence 3 and § 7a, Subsection 2 of the Atomic Energy Act). There is, as yet, no draft version of this. It will be patterned along the lines of the Statutory Ordinance to the Federal Emission Control Law.

- Allgemeine Verwaltungsvorschriften gemäß § 20 UVPG (General Administrative Provisions according to § 20 EIA Act). The latest draft version by the Bundesumweltminister is dated from June 1991. The final date for adoption by the Federal Government and the Bundesrat has not yet been set. It could take some time, because these are more or less guidelines and provide interpretation of the Act itself. Therefore different opinions about the scope and intentions of the EIA Act (EIAA) have to be resolved at this level. The draft version is not complete but it has been distributed extensively and is being applied in practice on a non-mandatory basis. Even without the general administrative provision, projects according to number 2 to 16 of the appendix to the EIA Act have to undergo an environmental impact assessment (projects according to number 1 of the appendix meeting this requirement from mid-1992). However, the lack of

[1] See, for updated information, EIA Regulatory Developments July 1991-March 1992 at the end of this annex.

formal guidelines makes it more complicated, to implement a new procedure in practice.

The implementation of the EEC Directive into German law is carried out by the Federal Government and the State Governments according to their legislative powers under the constitution. The general objectives, principles, and basic procedures of environmental impact assessment are subject to Federal and State legislation.

There are basically two types of consent procedures in Germany:

- Planfeststellungsverfahren (unified or concentrated consent procedures). Within these procedures, agencies have discretion in making consent decisions;

- Genehmigung (licensing). According to the concept of entitlement, the agencies in these cases have less discretion in granting permits for industrial installations.

Some projects of types listed in Annex II are subject to Länder-legislation only and some Länder will implement the EIAA by special acts. Other Länder are of the opinion that statutory ordinances are sufficient for the task (see Table 2 in the appendix to this annex). Following recent elections in some states (with resulting change in governments), some Länder have changed their attitude towards implementation, and will implement by an EIA Act rather than by statutory ordinance. In most cases, it will take at least until 1992 until the various state acts or statutory ordinances will have been adopted.

(b) <u>Deficiencies in formal compliance</u>

There is one undisputed deficiency: Germany did not keep the deadline for implementation into national law. Further, because the Statutory Ordinance of the Federal Immission Law has not been adopted, EIA according to the Act is still not a legal requirement for most industrial projects, including those listed in Annex I of the Directive.

Coverage of Annex II projects, even when all Ordinances are in force, is comprehensive

only in the sense, that it includes projects with respect to the numbered project categories and not in each of the alphabetically listed subcategories in Annex II to the Directive.

Additional problems may arise, because the term "project" has a different meaning than the German term "Vorhaben" in the EIA Act. One single project may comprise several Vorhaben, all with their individual EIAs.

The other deficiencies are not so much concerned with the formal compliance but rather with the interpretation of the "spirit of the Directive". They will be discussed in more detail in the questions about practice in Germany.

(c) **Reasons for delay in full compliance**

There are several reasons for the delay:

- The complexities arising from the federal organisation of Germany, especially the distribution of powers between the Federation and the Länder, has been one of the reasons for the drawn-out discussions about the best way of implementing the Directive;

- Maybe even more important, there was not great political pressure, since the major political parties only gave nominal support to the implementation of the EEC Directive. There was almost no public interest in the discussion because EIA was seen mainly as an administrative matter, and did not easily catch the attention of the press or the public.

- German environmental law is very fragmented and media-oriented. Because it had been decided from the outset to integrate EIA into the existing procedures (according to section 2 of the EIA Act, EIA is to be a component element of procedures applied by authorities when deciding upon the approval of projects), many of the existing legal procedures had to be adapted to accommodate the new EIA procedure;

- There is no structural problem with plan approval procedures/unified consent procedures (Planfeststellungsverfahren) which most public projects need. However, it has been difficult to make the necessary changes where ministerial decisions are concerned;

- The origins of environmental law in Germany date back about 150 years and has grown to be a very complex system. Because the EEC Directive was patterned along the lines of the Anglo-Saxon model of environmental law, integration into the German system was very difficult.

**(e) Competent authorities**

There has been no need to designate new competent authorities for the EIA, because the Federal Republic integrated the requirements of the EEC Directive into the existing environmental law. This means that the existing competent authorities, according to the sectoral law, are responsible for carrying through the additional requirements of the EIA. There are no new competent authorities; the tasks of the already existing ones have been expanded. In cases where the authorization of a project has to be carried out by several authorities, the Länder shall designate a competent authority which shall be responsible for, at least, the information on the probable scope of examination (section 5) and for the summarized description of environmental impacts (section 11) - it will, in fact, be a lead agency. According to section 14 the Länder may assign more of the responsibilities to this lead agency, but it may not become an "EIA agency", for example passing a final judgement about environmental compatibility. This task still lies with the competent authorities. The lead authorities perform their functions in cooperation with the competent authorities and the nature conservation authority, whose area of responsibility is affected by the project. The designation of competent authorities is, in general, undertaken by the Länder.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

**(a) Outline of criteria/thresholds**

The types of Annex I and Annex II projects covered by German law are shown in Table

1 in the Appendix to this review. There are thresholds for some projects in the annex to the appendix in the EIA Act. There are more in the Statutory Ordinance to the Federal Mining Act (Bundesberggesetz) and to the Federal Planning Act (Raumordnungsgesetz). There was some debate about lowering or raising those thresholds, when the bill was discussed in the Upper House (Bundesrat).

Examples for thresholds are:

- Dry distillation plants for hard coal and lignite, with 500 tonnes of coal or more throughput per day.
- Installations for gasifying or liquifying coal, with 500 tonnes or more throughput per day.
- Installations for the extraction of oil or gas from shale or other types of rock or sand, with 500 tonnes or more throughput per day.
- Installations for smelting cast iron or crude steel with a smelting capacity of 200,000 tonnes or more per year.
- Smelting plants for non-ferrous metals with a capacity of 100,000 tonnes or more per year.
- Installations for the manufacture of glass, also if it is produced from waste glass, including glass fibres with a capacity of 200,000 tonnes or more per year, as well as installations for plate glass which are operated in a float glass procedure, with a capacity of 100,000 tonnes or more per year.
- Installations for applying metallic protective coatings of lead, tin or zinc on metal surfaces by means of melt baths or flame spraying facilities with an annual capacity of 100,000 tonnes or more throughput of raw material.
- Shipyards for the construction of ocean-going vessels with a volume of 100,000 gross register tonnes or more.
- Installations for keeping or rearing poultry or keeping pigs which are designed to accommodate:
    a) 42,000 hens;
    b) 84,000 pullets;

c) 84,000 fattening poultry;

d) 1,400 fattening pigs; or

e) 500 sows or more.

In the case of installations with a mixed stock of animals the percentage figures to which the above-mentioned limits are reached shall be added. If the aggregate of all percentage figures reaches 100 the environmental impacts shall be assessed. Livestock of less than 5 per cent of that referred to under a) to e) shall not be included in the calculation of the relevant size of the plant.

More thresholds will be established for projects within the state acts or state regulations. In the state of Northrhine-Westphalia, for example, projects for the pumping out of more than 500 million cm of groundwater per year will have to undergo an EIA.

Since major alterations of a plant, as far as they have significant effects on the environment, are also subject to an EIA, there is, in effect, an additional assessment procedure for alterations to determine whether there is a significant effect. This determination is not done by numerical thresholds, but rather by an interpretation of the terms "considerable alterations" and "significant effects". The first of these terms has already been well defined in several court cases. If there are additional or different types of emissions generated by the plant alteration, it is determined to be 'considerable'. To have a significant effect on the environment, a project needs just to have an effect on at least one element of the environment.

**(b) Comment on criteria/thresholds**

The definitions of the thresholds are sufficiently clear. Whether the level is always appropriate or not is harder to determine. Environmental groups criticize existing thresholds as being generally too high, but have not been specific on detailed criticisms. The issue of thresholds seems to have been mostly ignored in the public debate about EIA in Germany and only a few experts raised this question in the hearings. For the environmentally important area of chemical projects, Germany chose not to introduce any thresholds while other Member States narrowed the scope of projects by introducing certain criteria.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

### (a) Number and categories of EIAs

Determining how many environmental assessments will be carried out in Germany each year and, what will be their principal project categories, is very difficult. No actual numbers or firm estimates can be given since the EIA Act only went into effect on 1 August 1990 and, up to now, only applies to some of the projects listed in the appendix of the EIA Act. There is no central register of projects covering all the consent procedures and operated by the Federal Government because, according to the constitution, this task falls under the responsibility of the states. So there can be no overall official estimate of the number of expected EIAs. Compared to certain other Member States the number will be much higher because significant alterations of projects have been included in the Act. Especially in the case of chemical plants, new projects will be the exception, and most EISs will be done for alterations. Once all the regulations are in force, the number will exceed 1,000 per year.

### (b) Information specified in Article 5 and Annex III

It is to be expected, that developers will satisfactorily provide, in their environmental assessment documents, the information specified in Article 5 and Annex III of the Directive. Experience with regular consent procedures shows that the developer will provide the necessary information if only not to cause unnecessary delay in obtaining authorization.

According to the EIA Act, alternatives have to be developed only as far as the type of project makes them necessary for the assessment of environmental impacts and provision of them by the developer can reasonably be expected. Information relating to submitted alternatives has to be taken into account by the authorities.

### (c) Making authorities' information available to the developer

The authorities with relevant information in their possession are required to make this information available to the developer. They have to do so according to the Verwaltungsverfahrensgesetz (administrative procedure act), which regulates the way authorities

have to handle consent procedures.

**(d) Arrangements for publication of EIS**

According to the German EIA Act there is no provision for the publication of a special EIS or of some kind of EIA report. This is sometimes done voluntarily. In all other cases, the information relating to the EIA is presented to the public, together with the other information necessary for the consent or plan approval procedure[3].

**(e) Arrangements for consultation and public participation**

Experience in practice with arrangements for consultation and public participation still has to be gained with regard to the EIA Act. Consultation and public participation have been to some extent part of the regular consent procedures before so, to this extent, there should be no special problems. The EIA Act has led to some extension in provisions for public participation and some standardisation.

**(f) Transborder impacts**

Prior to the approval of the EIA Directive, there have been, in the border regions, agreements on transboundary consultations. These could be extended to include the EIA procedures. The practical implementation of this requirement falls within the jurisdiction of the States, and up to now, there have been no provisions for this. In some cases, transboundary consultation has worked satisfactorily, in other cases it has been non-existent. Section 8 of the EIA Act provides, as does the Directive, for participation of authorities of other countries only, and not of the affected or general public. The German EIA Act goes somewhat further than the Directive as it includes the four neighbouring countries, out of the nine that Germany borders, that are not part of the EEC.

**(g) Role of EIS and consultation findings in project authorization**

Since EIA is part of the regular consent procedure, the information relating to the EIA is taken into account in the final decision just as other considerations are. The same holds true

---

[2] In order to standardise and simplify the terminology used within this report, 'EIS' is used to refer to this information, whether or not it is contained within a separate report.

for the results of consultations. The competent authority summarizes the project's impacts on the goods worth protecting on the basis of the documents provided by the developer, the statements made by authorities and on the basis of opinion voiced by the public. The results of investigations carried out by the competent authority itself are also to be incorporated. This summarizing description shall be prepared, if possible, within one month after the consultations have been completed. The summarizing description can be part of the document that contains the reasoning for the decision on the project's approval.

The competent authority assesses the project's environmental impacts on the basis of the summarized description and will take this into account when deciding upon approval of the project with regard to efficient prevention of environmental damage pursuant to the guiding principles of the EIA Act and to the applicable laws.

After the decision the competent authority makes available the decision on the approval of the project and the reasons for the decision to those concerned, whose names are known, and to those on whose objections the decision has been made. In the case where the project is dismissed, those concerned, and those who made objections, are informed.

Practice has yet to show, whether it will be really possible, to properly "take into account" the results of the EIA when deciding upon approval of a project. A debate centres round this question and has led to a formal complaint to the European Commission by nature conservancy groups on which there are differing opinions.

In practice, there are binding quantitative standards for only a few effects compared to the range of possible effects to be included in an EIS. In the draft administrative regulations the government will list additional orientational standards for the protection of fauna and flora, for water and soil quality. According to the draft regulation, it should be possible, to dismiss an application, whenever all the environmental effects are just barely staying below the standards. In this case the principle of "Common Good" would be violated, even though some of the legal standards are not surpassed. The results of the trial run showed, that applying the principles of the EIA Act, the transfer of pollution from one environmental sector to the other can be taken

into account and prevented.

Another controversy centres upon the term "inter-action" in the Directive. According to some critics, standards from sectoral acts cannot be properly applied to assess cross-media effects or the inter-action of effects. Thus, they say, assessment "pursuant" to the applicable laws violates this requirement of the EEC Directive. However, the report of the lead committee of the German Parliament (federführender Umweltausschoß des Deutschen Bundestages) indicates that the application of the Act will itself change the interpretation of the sectoral acts, because the decision has to be made having regard to the efficient prevention of environmental damage.

**(h) Modification of projects**

Projects in most cases will be modified, to some degree, as a result of the environmental assessment procedure. There are already cases, where projects have been cancelled because environmental assessment made the negative environmental consequences of the project obvious. It is not possible to give a quantitative statement on this question because many alterations, especially to large-scale projects, are part of the regular planning and permit procedure, so changes cannot always be traced back to the EIA itself. Some changes take part within the discussions with the authorities without ever being documented.

Of the three cases in the trial run (Planspiel) one project (power station) has been dismissed, the second project (a waste disposal installation) was given the plan approval only after mitigation measures were agreed and in the third case (a chemical plant) the application has been dismissed after the initial scoping. In all these cases the final decision has been influenced by the EIA. It has to be mentioned though, that these cases have been selected and designed especially for this trial run.

In answering questions on the working of the EEC Directive or the EIA Act in practice, one has to bear in mind that, because of the delay in implementation, there are only few cases as yet of practical experience with EISs according to the EIA Act, and in most instances the studies or procedures for these still have to be completed. So one can only draw conclusions, so far, from the experiences with regular consent procedures or from experiences with locally

applied municipal EIAs.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO GERMAN LEGISLATION AND PRACTICE

### (a) Measures to monitor implementation of Directive

There have been no formal measures undertaken to monitor the implementation of the Directive, since the existing ones are supposed to be sufficient. Apart from the regular and court control mechanisms there are special federal/state institutions, where problems of implementation can be discussed. Experience will show whether or not it would be reasonable and desirable to monitor the practical compliance. There may be a need for a central register serving the following purposes:

- Establishing a data base of EIA cases, documents, etc. to facilitate the exchange of information;
- Monitoring the relation between consent procedures in general and consent procedures according to the EIA Act. By this it would be possible to track compliance with the spirit of the EIA Act and to see whether there are differences between the States in their implementation experiences.

### (b) Provision for scoping

Scoping has been introduced by section 5 of the EIA Act. As soon as the developer informs the competent authority about the planned project this authority shall discuss with him the subject, extent and methods of the environmental impact assessment as well as other questions of significance for the conduct of the assessment. For this purpose other authorities, expert and third parties may be called in. The competent authority shall inform the developer on the probable scope of the assessment as well as on the type and scope of the documents to be provided.

In practice, especially in the case of complex consent procedures, some kind of scoping was already part of the regular procedure. However, there were no formal requirements, third parties were not included and scoping was left to the competent authority. Now scoping is an

important and mandatory part of the consent procedure, even though, formally speaking, it does not belong to the actual consent procedure. The agencies have to meet beforehand and the subject, extent and methods of the EIA have to be discussed with the developer. The agencies have to meet and discuss in person which in itself is progress. The nature protection agency also has to be involved from the beginning. However, it could be regarded as a major deficiency that interest groups only "may be called in".

Scoping will be a very important stage in the whole EIA procedure. The competent authority has to inform the developer about the scope of the EIA in writing. It is up to the developer to ask for the scoping procedure; he is not forced to do so. By making it an informal step of the EIA procedure it is hoped that scoping will be used more extensively and will be more productive. On the other hand, a scoping document is needed to be able to assess the adequate coverage of the final EIS.

(c) Quality of EISs

Since there have been as yet no EISs prepared according to the EIAA, no judgement is possible about the quality of the EISs according to these legal requirements. In practice, however, there already exist a large number of documents that could, more or less, be called an EIS. Some of them have been prepared for projects that now require an environmental assessment under the EIAA. Since there is no central register of the EISs already prepared a systematic survey of the quality of these is not possible.

However, there have been a few studies of the adequacy of these EIS-like documents. One study examined twelve land-use plans (Bebauungspläne), seven of which comprised designations for industrial areas (Industriegebiete). According to the EIAA, these would have to undergo a tiered environmental assessment. Up to now there has been no EISs for a general land-use plan (Flächennutzungsplan) as a pre-requisite for the EISs for the subsequent binding land-use plan. This will change because of the EIAA. The inclusion of alternatives or the no-project alternatives are still very rare. One of the main points mentioned in the study was the methodological deficiencies in evaluating the indirect, secondary and cross-sectoral effects.

Another study looked especially at the methodological approaches to the assessment and aggregation of information related to the EIA. Fifteen documents were analysed. The studies had been prepared between 1980- 1987, and 50% of them were for roads. The study points out, the striking discrepancy between the evaluation methods developed in theory and those applied in practice.

There are some outstanding environmental studies that are much further reaching in their content and methods than will be required by the EIAA. A substantial number of studies prepared prior to the new EIA Act were less than satisfactory, but again it has to be remembered that there was no requirement to prepare EISs at that time.

Since according to the German EIAA, the procedure will be integrated into the regular approval procedure, the additional requirements for an EIA should at least raise the quality of the authorization practice itself.

**(d) Provision for formal review of adequacy and quality of EISs**

The legal provisions for the formal review of the adequacy and quality of EIS will be handled according to the supervising and control powers of the sectoral law. In turn, this has to be interpreted according to the guiding principles of the EIA Act. The quality and adequacy of the EIS cannot be challenged directly in court, but only as part of the general consent procedure. The involvement of the public according to section 9 of the EIA Act does not constitute in itself the basis for legal claims. Pursuit of claims in subsequent approval procedures will not be effected. The plaintiff would have to be directly affected by the environmental effects of the project and there would have to be a reasonable assumption, that this has been caused by a deficient EIA.

The administrative regulation (Verwaltungsvorschrift) will serve as a guideline and baseline for judging the adequacy and quality. Judgement about the appropriate coverage of an assessment is up to the agencies involved in the decision making process. There have been proposals for independent agencies or institutions to assess the scope of the assessment. This seems to be fair, at least for those cases where there could be conflicts of interest, because the

applicant and the agencies involved are linked institutionally or by common interests.

(e) Provision for monitoring and post-auditing

The environmental impacts of some projects are monitored on a regular basis and in some cases the consent agency is entitled to require additional mitigation measures or alterations in the light of this. So monitoring is, in general, not a problem. Air quality inventories are an important part of the clean air plans and there are general environmental information systems at the state levels, either operating or being designed. So air quality, at least in areas where pollution is assumed to exist, is monitored on a regular basis, and projects that violate ambient air standards could be traced. Especially for soil, water and some nature areas, there are more and more state-wide monitoring programmes. This comprehensive approach has been recommended by the Council of Environmental Advisors, because monitoring each single project would be inefficient.

There are at least three post-auditing environmental studies for large-scale projects being undertaken at present.

(f) Assistance to practitioners

There has almost been a flood of training programmes, seminars and publications to assist in implementing EIA into practice, though these have been of differing quality.

Governmental organisations: The Umweltbundesamt commissioned several studies on the implementation of the EEC guideline (organisational and legal studies) and for project-related check-lists. The Bundesumweltministerium conducted a trial run (Planspiel), to test the practicability of the EIA, the statutory ordinance (Rechtsvorschrift) and the administrative regulations (Verwaltungsvorschrift). Three specially designed cases with different kinds of approval procedures were tested. The results have been published in a report. The Bundesakademie für Öffentliche Verwaltung conducts training sessions. There are numerous seminars provided at the state level.

Non-governmental organisations, nature protection groups and business organisations have

organized numerous seminars on the subject. Some of these seminars and publications have been partly funded by the Umweltbundesamt, the Bundesumweltministerium or the States.

Because of the controversial and drawn-out debate about the implementation of the Directive, some of the publications and most of the seminars have been somewhat biased in nature. The majority of them could not be called training sessions in the strictest sense; they served more the purpose of general information exchange or criticism directed at the EIA Act.

EIA training at state level has mostly been by means of short courses. For some years there has been an increasing tendency to take up more specific issues, such as EIA of certain kind of projects or special matters. Full-time training courses at universities or other institutions have been held much more rarely. An overview of short course programmes indicates that case studies seem to be gaining importance; these case studies are usually presented by one of the practitioners involved and may subsequently be discussed by trainees. There seem to be almost no learner active training courses being provided as yet.

Many in-house courses have been held at the municipal level; they are important in respect to EIA for land-use plans. With the EIA Act being in force for at least some projects, there will certainly be more training programmes in the future tailored especially to the needs of administrators and consultants.

**(g) Effect on timescale, costs, etc.**

Whether, and if so how, the costs or time scale of projects will be affected by undertaking in EIA is up to now pure speculation. There will be some additional costs for administration personnel and there will be additional costs for studies of certain environmental effects. There may be some cases where, because of better planning procedures, the final costs will be lower. At least for industrial projects it has been proved, that environmentally sound production methods, especially with regard to waste reduction are, in many cases, cost saving. Additional mitigation measures may lead to some additional costs. There is no reason to expect EIA to result in a cost increase that would lead to an economic burden on the developer.

The estimates about the time scale needed, with and without an EIA, have to differentiate between the period of introducing the new approval procedure and the period after it has become routine. Right now, in the beginning of the implementation of the EIAA, there may be some delay because of uncertainties about the necessary scope and administrative procedures. Later on these requirements should be integrated into the regular procedure and there should be no further delay. For so-called "parallel" approval procedures, EIA could even lead to a more stream-lined and thereby shorter procedure. The majority of the participants in the trial-run expect a shortening of the consent procedure. The EIA procedure could lead to less litigation and, by this, shortening of the period from the application to the actual operation of the project.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

### (a) Provisions already made

The legal provisions being made in Germany, when fully implemented, should comply with the formal requirements of the Directive, although not all observers would agree with this. In some respects the EIA Act goes beyond the Directive. These include coverage of major modifications to projects listed in Annex II, projects concerning military defence, consultation with non-EEC neighbouring states in the case of transboundary aspects, and land use plans.

It is too early to pass an overall judgement about deficiencies in implementation. In some cases agencies and developers already do more than required. Studies on the implementation of legal requirements in practice in the area of environmental law have shown deficits like in all other areas, and the same will happen with EIA. After a transition period there is no reason, why there should be a special "EIA implementation deficit".

Analyzing deficiencies in implementation would have to follow a two step screening procedure:

- What would be the intent of the Directive?
- Is it possible to realize this intent following the integration of the EIA into sectoral law?

The first question is open to some debate and different opinions, the second question has been covered by some studies, but more practice is needed.

There are some points that need closer scrutinizing in the future, for example:

- The concept of (informal) scoping will need some monitoring to see how well it works in practice;
- The role of the lead authority and how effective it is in securing the integrated EIA process which is so important;
- Is the environmental information provided by the developer satisfactory and could the incorporation of this information within the developer's other consent submission documents be a source of weakness?
- Are alternatives treated sufficiently?
- Are the provisions for consultation in public participation sufficient to satisfy the "spirit" of the Directive and how well are these matters handled in practice? There are indications, that practice is rather restrictive, especially relating to the participation of the public of neighbouring European states;
- Will the EIA process be weakened by the use of article 1(5) to expedite planning processes. This is especially an issue in former East Germany in the case of exemptions from the formal requirements of an EIA or weakening the tiered EIA procedure by omitting the early stages (Beschleunigungsgesetz).

**(b) Ambiguities in the Directive**

The meaning of the term "interaction" in Article 3 is not clearly defined. Article 6, paragraph 2 does not state clearly, how to differentiate between participation of the general public and the 'affected' public. Article 8 is open to differing interpretations; the debate in Germany about formal implementation centres on the term "taken into consideration". For the implementation of Annex II it is not clearly defined whether the term "classes" in Article 4, paragraph 2, sentence 2 refers to the numbers or the letters of Annex II. The German interpretation has been that the term refers to numbers only.

(c) **Recommendations for more satisfactory, cost effective compliance in Germany**

Consent procedures should be developed in the direction of unified procedure to allow one agency to take into account all environmental effects and by this take the place of several agencies now deciding on one project.

There should be more emphasis on the development of environmental standards that move in the direction of precaution and which would be more suited to be used for an EIA.

There should be a central register of EIAs being conducted and some review body (not necessarily an agency) for the quality of the studies.

## APPENDIX

### Table 1: Implementation of the EIA Act at the Federal (Bundes) Level

| | Project (Vorhaben) | Federation* (Bund) |
|---|---|---|
| Annex I (Anhang 1) | | |
| 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. | X |
| 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 (except, research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load). | X |
| 3. | Installations solely designed for the permanent storage or final disposal of radioactive waste. | X |
| 4. | Integrated works for the initial melting of cast-iron and steel. | X |
| 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. | X |
| 6. | Integrated chemical installations. | X |
| 7. | Construction of motorways, express roads and lines for long-distance railway traffic and of airports with a basic runway length of 2100 m or more. | X |
| 8. | Trading ports and also inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1350 tonnes. | X |
| 9. | Waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes. | X |
| Annex II (Anhang 2) | | |
| 1. | **Agriculture** | |
| (a) | Projects for the restructuring of rural land holdings. | X |

| | | |
|---|---|---|
| (b) | Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes. | - |
| (c) | Water-management projects for agriculture. | X |
| (d) | Initial afforestation where this may lead to adverse ecological changes and land reclamation for the purposes of conversion to another type of land use. | X |
| (e) | Poultry-rearing installations. | X |
| (f) | Pig-rearing installations. | X |
| (g) | Salmon breeding. | - |
| (h) | Reclamation of land form the sea. | X |
| 2. | **Extractive industry** | |
| (a) | Extraction of peat. | |
| (b) | Deep drillings with the exception of drillings for investigating the stability of the soil and in particular: - geothermal drilling, - drilling for the storage of nuclear waste material, - drilling for water supplies. | X |
| (c) | Extraction of minerals other than metalliferous and energy-producing minerals, such as marble, sand, gravel, shale, phosphates and potash. | X |
| (d) | Extraction of coal and lignite by underground mining. | X |
| (e) | Extraction of coal and lignite by open-cast mining. | X |
| (f) | Extraction of petroleum. | X |
| (g) | Extraction of natural gas. | X |
| (h) | Extraction of ores. | X |
| (i) | Extraction of bituminous shale. | X |
| (j) | Extraction of minerals other than metalliferous and energy-producing minerals by open-cast mining. | X |
| (k) | Surface industrial installations for the extraction of coal, petroleum, natural gas and ores, as well as bituminous shale. | X |
| (l) | coke ovens (dry coal distillation). | X |
| (m) | Installations for the manufacture of cement. | X |
| 3. | **Energy industry** | |

| | | |
|---|---|---|
| (a) | Industrial installations for the production of electricity, steam and hot water (unless included in Annex I). | X |
| (b) | Industrial installations for carrying gas, steam and hot water; transmission of electrical energy by overhead cables. | X |
| (c) | Surface storage of natural gas. | - |
| (d) | Underground storage of combustible gases. | - |
| (e) | Surface storage of fossil fuels. | - |
| (f) | Industrial briquetting of coal and lignite. | X |
| (g) | Installations for the production or enrichment of nuclear fuels. | X |
| (h) | Installations for the reprocessing of irradiated nuclear fuels. | X |
| (i) | Installations for the collection and processing of radioactive waste (unless included in Annex I). | X |
| (j) | Installations for hydroelectric energy production. | X |
| **4.** | **Processing of metals** | |
| (a) | Iron and steelworks, including foundries, forges, drawing plants and rolling mills (unless included in Annex I). | X |
| (b) | Installations for the production, including smelting, refining, drawing and rolling, of nonferrous metals, excluding precious metals. | X |
| (c) | Pressing, drawing and stamping of large castings. | - |
| (d) | Surface treatment and coating of metals. | X |
| (e) | Boilermaking, manufacture of reservoirs, tanks and other sheet-metal containers. | - |
| (f) | Manufacture and assembly of motor vehicles and manufacture of motor-vehicle engines. | - |
| (g) | Shipyards. | X |
| (h) | Installations for the construction and repair of aircraft. | - |
| (i) | Manufacture of railway equipment. | - |
| (j) | Swaging by explosives. | - |
| (k) | Installations for the roasting and sintering of metallic ores. | X |
| **5.** | **Manufacture of glass** | X |

| | | |
|---|---|---|
| **6.** | **Chemical industry** | |
| (a) | Treatment of intermediate products and production of chemicals (unless included in Annex I). | X |
| (b) | Production of pesticides and pharmaceutical products, paint and varnishes, elastomers and peroxides. | X |
| (c) | Storage facilities for petroleum, petrochemical and chemical products. | - |
| **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. | - |
| (f) | Installations for the slaughter of animals. | - |
| (g) | Industrial starch manufacturing installations. | - |
| (h) | Fish-meal and fish-oil factories. | X |
| (i) | Sugar factories. | - |
| **8.** | **Textile, leather, wood and paper industries** | - |
| (a) | Wool scouring, degreasing and bleaching factories. | - |
| (b) | Manufacture of fibre board, particle board and plywood. | - |
| (c) | Manufacture of pulp, paper and board. | - |
| (d) | Fibre-dyeing factories. | - |
| (e) | Cellulose-processing and production installations. | X |
| (f) | Tannery and leather-dressing factories. | - |
| **9.** | **Rubber industry** | |
| | Manufacture and treatment of elastomer-based products. | X |
| **10.** | **Infrastructure projects** | |
| (a) | Industrial-estate development projects. | - |

| | | |
|---|---|---|
| (b) | Urban-development. | - |
| (c) | Ski-lifts and cable-cars. | - |
| (d) | Construction of roads, harbours, including fishing harbours, and airfields (projects not listed in Annex I). | X |
| (e) | Canalization and flood-relief works. | X |
| (f) | Dams and other installations designed to hold water or store it on a long-term basis. | X |
| (g) | Tramways, elevated and underground railways, suspended lines of similar lines of a particular type, used exclusively or mainly for passenger transport. | X |
| (h) | Oil and gas pipeline installations. | X |
| (i) | Installation of long-distance aqueducts. | - |
| (j) | Yacht marinas. | X |
| 11. | **Other projects** | |
| (a) | Holiday villages, hotel complexes. | X |
| (b) | Permanent racing and test tracks for cars and motor cycles. | - |
| (c) | Installations for the disposal of industrial and domestic waste (unless included in Annex I). | X |
| (d) | Waste water treatment plants. | X |
| (e) | Sludge-deposition sites. | X |
| (f) | Storage of scrap iron. | X |
| (g) | Test benches for engines, turbines or reactors. | X |
| (h) | Manufacture of artificial mineral fibres. | X |
| (i) | Manufacture, packing, loading or placing in cartridges of gunpowder and explosives. | X |
| (j) | Knackers' yards. | - |
| 12. | **Modifications to development projects included in Annex I and projects in Annex I undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than one year.** | X |

N.B. Not every Vorhaben in the German EIA act conforms completely with the project in the EEC directive; in some cases one project may comprise several Vorhaben. In other cases a Vorhaben in the German EIA act may cover only part of the project in the EEC directive.

Gesetz zur Bescheleunigung der Planungen für Verkehrswege in den neuen Länden sowie im Land Berlin (Verkehrswegeplanungsbeschleuniggungesetz) vom 16.12.1991, BGBl.S.2174 (Act to expedite the planning for traffic projects in the new states and the state of Berlin)

To speed up the planning procedures in the new states, public participation will take place only at the project level. The EIA for routing procedures (Linienbestimmung) will be done without public participation. Since this is a tiered procedure, there will be an EIA with public participation in any case, as requested by the Directive.

Verordnung zur Änderung der 9. Verordnung zur Durchführung des Bundesimissions-schutzgesetzes vom 27.3.1992, BGBl.I, S.536 (Amendment to the 9th statutory ordinance to the Federal Immission Control Act. Regulates the EIA for industrial projects, Annex I to the Appendix to the EEIA. These projects will have to undergo an EIA beginning on 1 June 1992).

## Table 2: Implementation of the EEC Directive at the State (Länder) Level (as at July 1991)

| State (Land) | Implementation* | Time Schedule | Remarks |
|---|---|---|---|
| Baden-Württemberg | EIA act, additional projects from Annex II. | Draft. | A study to develop guide-lines for implementation has been commissioned. |
| Bavaria (Bayern) | Possibly EIA act. | | |
| Berlin | EIA act. | Draft, should be adopted by mid 1991. | |
| Brandenburg | | | |
| Bremen | Possibly EIA act, perhaps including additional projects (railway, roads). | Decision on the way of implementation should be made by mid 1991. | Commissioned together with Hamburg study on the deficiency of the statutory ordinance (Verwaltungsvor-schrift) for the EIA act. Estimates for about 20 EIAs per year, 13 consent agencies are involved. Therefore a separate EIA clearing house will be established. In February 1991 45 EIA projects were pending (construction 20, ports and traffic projects 8, economy 7, environmental protection 10). |
| Hamburg | Draft regulation, possibly some additional projects from Annex II. | Possibly EIA act in the long term. | |
| Hesse (Hessen) | Statutory ordinance, possibly EIA act. | Draft of general administrative provisions. | |
| Mecklenburg-Vorpommern | | | |
| Lower-Saxony (Niedersachsen) | EIA act, includes all projects from Annex II. | Preliminary draft, final draft by mid 1991. | |
| Northrhine-Westphalia (Nordrhein-Westfalen) | EIA act, additional projects: state roads, state railways, ground water pumping. | Draft. | |
| Rhineland-Palatinate (Rheinland-Pfalz) | Statutory ordinance. | Draft | |
| Saar (Saarland) | Statutory ordinance, possibly EIA act. | | |
| Saxony (Sachsen) | | | |
| Sachsen-Anhalt | | | |
| Schleswig-Holstein | Statutory ordinance, possibly EIA act. | EIA act not before spring of 1992. | |
| Thuringia (Thüringen) | | | |

* In the "new" German states, because of administrative problems, there have been no directives or ordinances to implement the EIA Act. However, in practice, these states are conducting EIAs according to the federal Act.

## Agencies, associations and persons consulted during the study

A check-list of questions was sent in English and in German to the following institutions, associations and persons with an explanation of the purpose of the study and the request for comments:

Herr Dr. Bohne, Herr Meyer-Rutz, Ministerium für Umwelt, Naturschutz und Reaktorsicherheit (The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)

Ministries of the sixteen states (Länder), responsible for implementation at the state level

Prof. Dr. K.H. Hübler Technische Universität Berlin, Institut für Landschaftsökonomie (Technical University of Berlin)

Prof. Dr. Wilfried Erbguth, Universität Bochum (University of Bochum)

Prof. Dr. Dieter Eberle, Universität Osnabrück/Standort Vechta (University of Osnabrück)

Prof. Dr. Fürst, Institut für Landesplanung und Raumforschung der Universität Hannover (University of Hannover)

Prof. Dr. Hans D. Jarass, Ruhruniversität Bochum, Lehrstuhl für Öffentliches Recht (University of Bochum)

Deutscher Industrie- und Handelstag (German Chamber of Industry and Trade)

Deutscher Gewerkschaftsbund, Bundesvorstand (German Trade Union)

Bundesverband der deutschen Industrie e.V. (German Association of Industries)

Landesgemeinschaft Natur und Umwelt Nordrhein-Westfalen e.V. (Environmental Association)

Prof. Dr. Eckart Rehbinder, Der Rat von Sachverständigen für Umweltfragen (The Council of Environmental Advisers)

Dipl.-Ing. Theophil Weick, Planungsgemeinschaft Westpfalz (Regional Planning Authority)

Regierungspräsidium Freiburg (President of a Governmental District)

Herr Reiner Kestermann, Institut für Landes- und Stadtentwicklungsforschung des Landes Nordrhein-Westfalen (Institute for State and Town Development Research of the State of North-Rhine Westphalia)

Herr Prof. Dr. Peter Oligmüller, vormals: Vereinigung industrielle Kraftwirtschaft e.V. (formerly: Association of Industrial Power Generation Facilities)

Regierungspräsident Köln (President of the Governmental District of Cologne)

Herr Dr. Eberhard Geissler, UVP Förderverein (Association for the Promotion of Environmental Impact Assessment)

Herr Dr. Manfred Schön, Bayer AG, Werksverwaltung Leverkusen - Umweltschutz - (Environmental Department of the Bayer Company)

Herr Burghard Rauschelbach, Dornier System GmbH

Herr Volker Kleinschmidt, UVP Forschungsstelle, Universität Dortmund, Fachbereich Raumplanung, Fachgebiet Landschaftsökologie und Landschaftsplanung (EIA Research Centre at the University of Dortmund)

Herr Stefan Voigt (Environmental Law Consultant)

Herr Dr. Wilfried Kühling, Bund für Umwelt und Naturschutz Deutschland (German Association for the Environment and Nature Preservation)

Herr Theo Hoffjann, Stadtverwaltung Düsseldorf (City Administration of Düsseldorf)

Deutscher Naturschutzring e.V. Bundesverband für Umweltschutz (Environmental Association)

Herr Martin Führ, Öko-Institut Darmstadt

Prof. Dr. Guido Schmidt, vormals: Gesamtverband des deutschen Steinkohlenbergbaus (formerly: Association of the German Coal Mining Industry)

**Sources consulted during the study**

In addition to the interviews and discussions the information contained within various reports, publications and minutes of parliamentary bodies have been used for the report. The main ones that have been consulted are listed below:

Bohne, E. (1989) Transforming the EC Directive of 27 June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment into German Law, Legal Studies and Services Ltd., UK.

Bohne, E. (1991) Umweltrechtliche Rechts- und Verwaltungsvorschriften auf dem Prüfstand - Erfahrungen aus einem Planspiel mit Ausführungsvorschriften zum UVP-Gesetz und zum Bundesimmissionsschutzgesetz, Jahrbuch zum Umwelt- und Technikrecht

Böhret, C.; Hofmann, M. (1990) UVP-Planspiel, Bericht und Auswertungsergebnisse, Speyer.

Bund-Länder Arbeitskreis UVP (1987) Thesenpapier: Anforderungen an die Umsetzung der EG-UVP-Richtlinie und weitergehende Empfehlungen aus Sicht des BLAK-UVP.

Bunge, T. (1986) Die Umweltverträglichkeitsprüfung im Verwaltungsverfahren, Köln.

Cupei, J. (1986) Umweltverträglichkeitsprüfung -ein Beitrag zur Strukturierung der Diskussion, zugleich eine Erläuterung der EG-Richtlinie, Köln, Berlin, Bonn, München.

Der Rat von Sachverständigen für Umweltfragen (1987) Stellungnahme zur Umsetzung der EG-Richtlinie über die Umweltverträglichkeitsprüfung in das nationale Recht, Bonn

Erbguth, W. (1991) Das UVP-Gesetz des Bundes - Europarechtliche Grundlagen und Inhalt, Eildienst Landkreistag Nordrhein-Westfalen 2: 17-28.

Feldmann, F. J. (1991) UVP-Gesetz und UVP-Verwaltungsvorschrift, Umwelt und Planungsrecht 4: 127-132.

Jarass, D. (1989) Auslegung und Umsetzung der EG-Richtlinie zur Umweltverträglichkeitsprüfung. Konkretisiert anhand der Probleme im Abfallrecht, Baden-Baden.

Jarass, D. (1989) Umweltverträglichkeitsprüfung bei Industrievorhaben, Köln, Berlin, Bonn, München.

Kloepfer, M; Rehbinder, E.; Schmidt-Aßmann, E. (1990) Umweltgesetzbuch, Allgemeiner Teilentwurf, Bonn.

Püchel, G. (1989) Die materiell rechtlichen Anforderungen der EG-Richtlinie zur Umweltverträglichkeitsprüfung, Münster.

Tettinger, P. J. (1989) Umweltverträglichkeitsprüfung bei Projekten des Bergbaus und der Energiewirtschaft, Stuttgart.

Additionally, manuscripts and drafts of regulations and statutory ordinances have been reviewed including the comments from environmental associations.

On April 24, 1989 the Parliamentary Environmental Committee of the German Bundestag held a public expert hearing on the EIA Bill. 18 experts from industrial, municipal and environmental associations and experts from universities presented their views. The minutes of the hearing are documented (Stenografisches Protokoll der 49. Sitzung des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit am Montag, dem 24.04.1989). In addition to this, written statements from 100 associations and institutions to the EIA Bill have been reviewed.

For the purpose of this study, two special data base searches were also commissioned on the following subjects:

- seminars and training courses on the subject of EIA in Germany since 1985 (UVP Förderverein: Auszug aus dem Veranstaltungsarchiv des UVP Fördervereins);

- Compilation of Manuals, Studies and Guidelines on the Subject of EIA, published in Germany between 1985 - 1991 (UVP Forschungsstelle, Universität Dortmund: Zusammenstellung von Arbeitshilfen (1985 - 1991) zur UVP in der Bundesrepublik Deutschland).

## ANNEX FOR GREECE

### INTRODUCTION

This annex has been prepared using a variety of sources of information including consultations with personnel in official administrations, developer organisations, consultancies and environmental interest organisations. Their assistance is greatly appreciated whilst acknowledging that the contents of this annex are the author's responsibility and any views expressed are not necessarily shared by all of those consulted.

### 1. EXTENT OF FORMAL COMPLIANCE BY GREECE WITH THE REQUIREMENTS OF THE DIRECTIVE

The EIA legal framework was created in 1986, when Law 1650 for the Protection of the Environment was passed in the House of Commons. This Law established a system of environmental licences requiring EIA of new (or major modifications to) projects and activities that might significantly affect the quality of the environment.

Law 1650 was not implemented until late October 1990 because it required the promulgation of a number of ministerial decisions and circulars that would activate the enforcement of its provisions.

Two Ministerial decisions were issued on the 25th and the 26th of October 1990 and are the following:

a) Ministerial decision 69269/5387/25-10-90, which refers to the classification of projects and activities in categories, the content of EISs, the content of Special EISs and other related provisions according to Law 1650.

This decision implements articles 1, 2, 3, 4, 5, 6 par.1, 8, and 11 par.2 of Directive 85/337/EEC and articles 1, 2, 3, 4, 6, 7, 11, 12, 13 and 15 of

Directive 84/360/EEC.

b) Ministerial decision 75308/5512/26-10-90, which refers to the determination of the means for informing the public and its representatives about the content of an EIS according to the provisions of article 5 par.2 of Law 1650.

This decision implements articles 6 par.2 & 3, 7, 9, and 10 of Directive 85/337/EEC.

The two decisions implement Law 1650 and, at the same time, appear to comply fully with the requirements of Directive 85/337/EEC, at both national and regional level. Their provisions in detail are as follows:

**Ministerial Decision 69269/5387/25-10-1990**

The Ministerial Decision refers to both private and public projects and activities of categories A and B of article 3 of L.1650/86, excluding those serving national defence purposes.

It classifies projects and activities in two broad categories (A & B) in accordance with Directive 85/337. Category A projects are subdivided in two groups I & II which are all subjected to EIA (I) & (II) respectively. The decision specifies the content of these two types of EISs.

It also describes procedures for the approval of the site of the project and for granting a licence of installation.

Projects or activities under construction or which have already been granted the relevant approval or installation licence have to adapt to the new procedures regarding the approval of environmental conditions, after 4 years from now. If, in the meantime, it is noticed that the environment is not sufficiently protected new environmental conditions may be enforced, according to this ministerial decision.

The decision also introduces "Special Environmental Study" (SES) for the management and development of protected areas of great environmental interest.

The authorities designated to:

a) examine the EIS;

b) collect the opinions of the public and of other interested bodies and authorities; and

c) approve and determine the environmental conditions to be followed;

are the Ministry of Environment, Planning & Public Projects (EPPP) and the competent Ministry for the project. The two Ministries request the opinion of the Organisation for Athens or Thessaloniki in case the project under assessment is to be constructed in either of these Greater areas. In any other area the file of the case is forwarded to the Council of the competent Prefecture to express an opinion.

(i) Classification of projects and activities in categories

All projects and activities are classified in two main Categories (A and B) as follows:

Category A

**Group I**: This includes all projects subject to article 4 (1) of Directive 85/337/EEC (Annex I).

**Group II**: This includes all projects listed in Annex II of Directive 85/337. There have also been added 2-3 types of projects which are not included in the Directive. No projects have been exempted for any reason. Specifically included, in brief, are the following:

1) Agriculture

Annex II projects and activities, specifically mentioning the following thresholds:

e) Poultry-rearing installations with over 5,000 chickens.

f) Pig-rearing installations with over 20 pigs and their derivatives.

g) Salmon breeding, fish-ponds and fish-breeding stations.

2) Extractive Industry

Annex II projects and activities including also the following:

m) Installations for the manufacture of cement and quick or slaked lime.

n) Industry of ceramics and in particular of fire-resisting bricks, acid-resisting pipes, heavy floor-bricks and tiles, as well as roof-tiles.

3) Energy Industry

4) Processing of metals

5) Manufacture of glass

6) Chemical Industry

7) Food Industry

8) Textile, leather, wood and paper industries

9) Rubber Industry

10) Infrastructure projects

11) Other projects

Annex II projects and activities including also:

k) Solid waste and waste water treatment plants using incineration (excluding toxic and dangerous wastes included in Group I)

12) Modifications to development projects included in Group I and projects in Group I undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than a year.

Category B

This includes all projects and activities which are not mentioned in category A as long as a permit is required for their installation and operation.

(ii) Content of EIS

The content of EIS (I) for projects and activities listed in Category A, Group I is described in brief in Table 1.

The content of EIS (II) for projects and activities listed in Category A, Group II is

**Table 1: Content of EIS (I) for Group I projects**

1. Summary

2. Location, area, administrative jurisdiction.

3. Detailed description and listing of present environmental conditions (Maps, ecosystems, soil, waters, air, climate, landscape, flora, fauna, hydrographic and hydrologic data, human environment, infrastructure, natural resources, existing pollution sources and impacts, etc.)

4. Description of the proposed project or activity including:

   4.1 Alternative solutions;
   4.2 Construction period;
   4.3 Operation period
   (In case the installation is productive the EIS should also include data about personnel, raw materials, products, use of water and energy, gas, solid and toxic wastes and their treatment, noise, other nuisances, flow charts);
   4.4 Assessment and significance of environmental impacts;
   4.5 Measures envisaged in order to avoid, reduce or remedy adverse effects;
   4.6 Programme for monitoring the environmental impacts.

described in brief in Table 2.

**Table 2: Content of EIS (II) for Group II projects**

1. Summary

2. Geographical place

3. Present environmental conditions (briefly)

4. Flora and fauna (general description)

5. Description of the project or activity and assessment of its impacts on the environment

6. Measures envisaged in order to avoid, reduce or remedy important effects on the environment

7. Instructions for the operation of anti-pollution systems

The questionnaire described in Table 3 is considered to be a simple EIS for Category B projects and activities. In certain cases the interested party may be asked to justify its responses to the questionnaire or to provide additional data.

**Table 3: Content of questionnaire for Category B projects**

- It includes location, administrative jurisdiction and brief description of the project.
- The environmental impacts on soil, waters, atmosphere, etc. are presented in the form of a checklist by ticking the appropriate box (YES - MAYBE -NO).

Example

| | YES | MAYBE | NO |
|---|---|---|---|
| Does the proposed project: | | | |
| - produce significant emissions in the air or deteriorate the air quality? | ---- | ---- | ---- |
| - increase the use of natural resources? | ---- | ---- | ---- |

In case the answer to any of the listed questions is yes the questionnaire has to be accompanied by:

a) Probable significant impacts (types and quantities of emitted pollutants, etc.).
b) Technical description of the proposed measures for preventing or remedying environmental impacts.
c) Description of possible alternative solutions if any.

The questionnaire also accompanies the application for the approval of the site of Category A, Group I & II as a preliminary environmental assessment of the proposed project.

The difference between the two types of EIS is in the detail of description of the required data, and in the description of alternatives and environmental impacts.

(iii) Special Environmental Studies (SES)

The term SES refers to every scientific study or research which aims at:

a) the assessment and appraisal of the importance of the an environmentally protected area.

b) The formulation of proposals regarding measures for the protection and/or management of the subject under study and its greater area.

The content and the main requirements of SES are:

- Description of the protected area;
- Assessment, importance and classification of the protected area according to the criteria of articles 18 & 19 of law 1650;
- Specific determination of the boundaries of the protected area;
- Management and development proposals, financing possibilities, realisation of the proposed schemes;
- Preparation of an announcement file and of a draft presidential decree in order to inform the public before a final decision is taken.

**Ministerial Decision 75308/5512/26-10-90**

The Decision deals with the procedures to be followed for the publication of an EIS. This responsibility belongs to the Council of the local Prefecture, which consists of the Mayors of the prefecture, government representatives, representatives of the Technical Chamber of Greece, etc. The Council has to take all the necessary measures to ensure that the public and other interested bodies are given the opportunity to be informed about the content of the EIS and to express their opinion before the project is initiated.

The whole procedure cannot exceed 30 days counting from the day the Prefecture receives the EIS. An announcement has to be published in the local press inviting the public and other interested parties to be informed and to express their opinions. Copies of the announcement and the abstract of the EIS are also bill-posted at the Prefecture. The public can also have access to the whole EIS which remains at the office of the prefecture. The expressed opinions and suggestions are forwarded to the competent department of the Ministry of EPPP and are taken into consideration before the final decision is made.

The final decision referring to the approval of environmental conditions is forwarded to the local prefecture which ensures that the public and its representatives are informed about its content.

Ministerial Decision 75308 also provides for the exchange of information between Member States in cases the proposed project or activity is likely to have significant impacts on the environment in another Member State or where a Member State likely to be significantly affected so requests. This provision has not yet been applied in practice.

**Project authorization procedures**

The two ministerial decisions determine the following project authorization procedures:

(i) Initial approval of siting (for both Group I and II projects)

- Application to the competent department (local or regional) of the Ministry of EPPP, including all necessary documents and the questionnaire (Table 3).
  The file is forwarded (within 20 days at the latest) to the central or regional department of the competent Ministry, which has to express an opinion in 20 days. If the 20 days are exceeded it is presumed (in the case of Category A, Group II projects only) that there is an agreed opinion on the approval of siting.

  If the environmental department, while examining the questionnaire, for a Category A, Group II project, concludes that the project does not have significant impacts on the environment, then the questionnaire stands for the EIS required for the next stage, which is the approval of environmental conditions.

- Opinions are collected from other competent authorities according to the category of the project.

- The approval of siting is granted by the regional General Secretary.

Note: The initial approval of siting is not required in cases of renovations to existing industrial

and related activities and projects a-i, par.2, group II (Extractive industry) excluding drilling for the storage of nuclear waste material. It is also not required for Category B projects.

(ii) Approval of Environmental Conditions

- Application to the Ministry of EPPP including:
  a) The Initial Approval of siting (if necessary)
  b) EIS-I or EIS-II (according to the project)
  c) Waste water disposal study (if necessary)
  d) Restoration study of forest areas (if necessary)

- Opinions are collected from other competent authorities, the public and other interested bodies.

- A common decision is granted by the Ministry of EPPP and the Ministry of Industry and Technology defining the necessary environmental conditions and is forwarded to the Council of the competent Prefecture.

- The Council informs the public about the decision according to M.D. 75308.

The Ministry of EPPP is preparing, and will soon publish, circulars and manuals that will clarify all EIA and licensing procedures. These will include illustrative diagrams indicating the steps that have to be followed according to the project or activity.

Some people have expressed concern that the EIS-I or EIS-II procedure only takes place after the siting approval has been granted. The concern is that i) it cannot directly influence the siting decision, and ii) it may have less influence once the initial siting approval has been given. However, the contrary view which has also been expressed, is that the initial siting decision is not the final decision and the EIS can have the necessary influence.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS

The new law and ministerial decisions have not specified new criteria or thresholds for the selection of projects that will be environmentally assessed, apart from those mentioned in Category A & B projects.

The Ministry of EPPP will soon issue circulars with specific criteria and thresholds and it is believed that these will be broadly similar to those used in other Member States. These circulars have legal status and will be binding.

Until these circulars are issued, criteria and thresholds contained in the previous regulation (P.D. 1180/81) will continue to apply. Examples of these are:

- storage, treatment and distribution of coal, over 200 tonnes daily;
- plating, oxidation of metals, aluminium anodic oxidation over 50 kVA;
- combustion of coke, of pet-coke and other solid fuel, over 1 million Kcal/h;
- dyeworks, bleach works using over 1000 kg of raw material per day.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

The above mentioned procedures have been applied in practice for only 5 months. This is a very short period that cannot provide accurate and credible conclusions as to how well Directive 85/337/EEC is working in practice.

In the meantime (1986 to November 1990) the Ministry of EPPP applied Law 1180/81 which provided for EIAs for industrial projects only. It also established criteria and thresholds for the selection of these projects and for the environmental conditions that should be followed by the developer. The law did not provide for public hearings and therefore no information concerning EISs was made public and EISs remained internal official documents.

This Law covered only some aspects of the later issued EEC directive and the procedures

that were followed were quite different. Therefore they cannot be directly compared to the new ones.

The impressions from the limited application of the EEC Directive until late 1990 can be summarised in the following:

1) It has been ensured that the developer supplies all the information specified in Tables 1, 2 and 3 (according to Annex III of the Directive). The authorities appear to make all relevant information available to the developer and there seems to be good cooperation between them.

   It has however been stated by both sides that in many cases the available data are unreliable or contradictory (mainly due to the lack of a nation-wide system of data acquisition) and can lead to the wrong conclusions.

2) The few examples of EIS publication, consultation and public participation to date have not been very encouraging. Some public hearings were held locally, the relevant documents were available just a few days in advance and there was limited public participation and information. The EIS was merely presented by reading it to the public and there was not enough time left for it to be discussed and analyzed. It is hoped that the newly established procedures will remedy these deficiencies.

3) It has been indicated that, in cases of strong public objection and/or significant environmental impacts, the EIS is taken into account and the project is modified accordingly. However for most of the small industrial projects the EIA procedure is simply routine, i.e. it is just one of the various papers that accompany the application for a permit.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO GREEK LEGISLATION AND PRACTICE

It is not known whether Greece has adopted formal measures to monitor the

implementation of the Directive within the country.

Scoping arrangements and EIA guidelines will be included in the circulars that are in preparation.

The time and the money devoted to the preparation of the EIS are not adequate. The EISs may be bulky and include a lot of data but often hide critical points and are not sufficiently documented. Alternatives are usually briefly presented and they are not given great importance. The greatest emphasis is given to the proposed solution.

Greece had some experience in preparing EISs for industrial projects, prior to the new regulations, and the quality of these, though initially poor, has improved considerably over time. There is limited experience with EIS for other projects.

The adequacy and quality of EISs is reviewed by PERPA and other competent departments of the Ministry of EPPP. To date, specific written guidance for this has not been provided. In the past, in most of the cases, the review of EISs was a more routine procedure. The new legislation however has made the review of EISs a stricter and tighter task that should ensure good control of EIS quality provided sufficient resources are made available for this purpose.

Monitoring the environmental impacts and post auditing of EIA studies is to be done by PERPA, a department of the Ministry of EPPP, which makes occasional checks. Lack of funds however does not allow frequent and full monitoring of all projects and activities.

It is a common belief that de-centralisation of the more routine elements of the monitoring system could lessen the duties of the central offices and so allow better overall, strategic control by the Ministry.

The Ministry of EPPP and other independent or government organisations have organised, and are planning to organise, a number of seminars to inform interested parties about the new

procedures and arrangements. The main deficiency is in manuals and guides but it has been stated that these will be prepared soon. Local consultants believe that a manual for each type of project would be of great assistance to their work.

Developers seem to follow reasonably accurately the legislation, and there have not been noted any delays due to EIA procedures. The cost of EIS preparation is very low up to now and therefore the costs and timescale of projects are not being adversely affected as a result of undertaking an EIA.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

Overall, 5 years later, the general opinion is that there are no deficiencies in formal compliance with Directive 85/337/EEC in Greece. The existing legal provisions cover all articles of the Directive and EIAs are to be carried out for all types of Annex I and II projects.

The EIA legislation is considered to be stricter than the Directive's, in certain aspects. Developers in Greece feel that these strict arrangements may make them less competitive in comparison to their colleagues in other Member States. On the other hand, the Ministry of EPPP believes that the new EIA procedures will give them the opportunity to apply stricter controls over developments regarding environmental matters and therefore improve environmental conditions in Greece.

The EIA legal provisions have been applied in practice for a very short period of time and therefore reliable conclusions cannot yet be drawn.

There have not been indicated any specific modifications to the EEC Directive, which may be desirable, from a Greek viewpoint, but it has been mentioned that the Directive is very general and allows each Member State to apply its provisions in very different ways. This may contradict the European Community's aim to provide equal opportunities and similar competition terms to all Member States.

The following recommendations should be considered to facilitate practical compliance:

- The role of the supervising department of the Ministry of EPPP (PERPA) has to be strengthened in order to implement full monitoring and post-auditing of the EISs. This will ensure that the EIS's findings and recommendations will not be ignored during the construction and operation of the project.

- It is important to establish a reliable nation-wide system for the acquisition of environmental data that will be available to developers, the public and any other interested party.

- The necessary circulars that will clarify the new procedures and remove any ambiguities need to be published soon.

- Training of all bodies involved i.e. personnel of the Ministry of EPPP, competent authorities, consultants, etc., is much needed.

- Publication of manuals and guidelines for specific types of projects is also much needed.

**APPENDIX**

**List of EIA laws**

- Presidential Decree 1180/81, ΦΕΚ 293 A/81.

- Law No. 1650/86 for the protection of the environment, ΦΕΚ 160 A/86.

- Ministerial decision 69269 / 5387 / 25-10-90, ΦΕΚ 678 B/90.

- Ministerial decision 75308 / 5512 / 26-10-90, ΦΕΚ 691 B/90.

## ANNEX FOR IRELAND

### INTRODUCTION

The annex for the Republic of Ireland has been prepared using a variety of sources of information including consultations with government departments, competent authorities, designated consultation authorities, development, conservation and other interest groups.

### 1. EXTENT OF FORMAL COMPLIANCE BY IRELAND WITH THE REQUIREMENTS OF THE DIRECTIVE

#### (a) Principal legal provisions

The Department of the Environment (DOE) is the principal department responsible for the implementation of the Directive in Ireland. Following the issuing by the DOE of non-statutory circulars to government departments and local authorities in July 1988, a total of 11 statutory regulations have since been adopted to bring the Directive into effect. The Regulations may be grouped under 3 headings as outlined under (i)-(iii) below.

(i) Regulations relating to motorways

- European Communities (Environmental Impact Assessment) (Motorways) Regulations, 1988 (S.I. No. 221 of 1988).
- Local Government (Roads and Motorways) Act, 1974, (Prescribed Forms) (Amendment) Regulations, 1988 (S.I No. 222 of 1988).

(ii) Principal regulations relating to private and public projects

- European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I No. 349 of 1989).
- Local Government (Planning and Development) Regulations, 1990 (S.I. No. 25 of 1990).

The above 1989 and 1990 Regulations are the principal Regulations relating to EIA in Ireland.

(iii) Other regulations

- Fisheries (Environmental Impact Assessment) Regulations, 1990 (S.I No. 40 of 1990).

- Fisheries (Environmental Impact Assessment) (No. 2) Regulations, 1990 (S.I. No. 41 of 1990).
- Gas Act 1976 (Sections 4 and 40A) Regulations, 1990 (S.I. No. 51 of 1990).
- Air Navigation and Transport (Environmental Impact Assessment) Regulations, 1990 (S.I. No. 116 of 1990).
- Petroleum and Other Minerals Development, 1960 (Section 13A) Regulations, 1990 (S.I. No. 141 of 1990).
- Foreshore (Environmental Impact Assessment) Regulations, 1990 (S.I. No. 220 of 1990).
- Arterial Drainage Acts, 1945 and 1955 (Environmental Impact Assessment) Regulations, 1990 (S.I. No. 323 of 1990).

**(b) Deficiencies in formal compliance**

The DOE considers, and it is generally agreed by practitioners, that the requirements of the Directive have now been fully implemented through the adoption of the Regulations outlined in 1(a) above. The overall assessment carried out under 5 below considers possible deficiencies in the implementation measures adopted.

**(c) Reason for delays in full compliance**

Initial attempts to bring the Directive into operation by means of circulars issued in July 1988 to local authorities and government departments were non-statutory. The subsequent adoption of the Regulations outlined in (a) above has brought the Directive fully into statutory operation, according to the DOE.

**(d) Remedy of any remaining deficiencies**

No further measures are in the process of being implemented, or envisaged in the implementation of the Directive.

**(e) Competent authorities**

For developments requiring planning permission, the local planning authority (87 in number) is the competent authority. In the case of an appeal against a decision of a local planning authority (which may be made by the applicant/developer or a third party individual or

interest group, etc.), An Bord Pleanála (the Planning Board) is the competent authority at national level. For developments carried out by local or state authorities (defined as Government Departments and the Commissioners of Public Works), the appropriate Government Department is the competent authority. For motorways and relevant road projects, for example, the EIS would be prepared by the local authority and the Minister for the Environment would be the competent authority.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

### (a) Outline of criteria/thresholds

Figure 1 shows the general relationship between the Directive and the principal Irish Regulations. Part I of the First Schedule to the European Communities (Environmental Impact Assessment) Regulations 1989 relates to Annex I of the Directive and Part II to Annex II.

Criteria and thresholds have been adopted for some Annex II projects in Part II of the First Schedule to the 1989 Regulations, and examples of selected criteria and thresholds are shown in Table 1.

The principal characteristics of the criteria/thresholds may be outlined as follows:

- Almost all Annex II projects are included. The restructuring of land holdings appears to be the only Annex II project not included.

- In some cases, such as for example "the extraction of petroleum", all projects within the particular "class" are subject to the EIS requirement, irrespective of scale.

- In other cases the criteria/threshold relates essentially to the scale of the project (the terms used being "quantity, area or other limit"). For example, an EIS is required for "industrial estate development projects, where the area would exceed 15 hectares" (Item 10 of Part II of First Schedule to 1989 Regulations).

Competent authorities have, in most instances, the power to require an EIS where the project is below the specified threshold. The general phraseology applied in the Regulations for such cases is as outlined in paragraph 6(1) of the Local Government (Planning and Development) Regulations 1990 in the context of planning applications as follows:

> Submission of environmental impact assessment in respect of certain other planning applications
>
> 6.(1) Where a planning authority receive a planning application in respect of any development which would be of a class referred to in article 4(1) but for not exceeding a quantity, area or other limit for the time being specified in relation to that class, and where they consider that the development would be likely to have significant effects on the environment, they shall by notice in writing require the applicant..to submit an environmental impact statement in respect of the development, and shall state that the application will not be considered further until the notice has been complied with.

**Figure 4: Outline contents of EC Directive and 1989/90 Regulations**

| EC DIRECTIVE | 1989/90 REGULATIONS |
|---|---|
| Articles 1-14 | Articles 1-26 (1989 Regulations)<br>Articles 1-48 (1990 Regulations) |
| (Mainly procedures relating to EIA Process) | (Mainly procedures relating to EIA Process) |
| **i. Projects requiring an EIS** | |
| Article 4(1) and Annex I<br><br>(EIS required) | Article 24 and First Schedule Part I of 1989 Regulations<br>(EIS required) |
| Article 4(2) and Annex II (EIS may be required at discretion of Member States | Article 24 and First Schedule Part II of 1989 Regulations<br>(EIS required) |
| **ii. What information to be contained in an EIS** | |
| Article 5(1) and Annex III | Article 25 and Second Schedule of 1989 regulations. Information which "shall" be included (Par. 2); Information which "may" be included (Par. 3). |
| **iii. Decision of the local planning authority or An Bord Pleanála** | |
| Article 9 | Article 8 of 1989 Regulations (EIS to be taken into account in decision on a planning application). |

Source: Environmental Impact Assessment - A Technical Approach, Edited by Conor Skehan, Geraldine Walsh and Kevin Bradley, 1991.

## Table 1: Selected criteria from Parts I and II of the First Schedule to the 1989 Regulations

First Schedule - Part II

1. Agriculture

(e) Pig-rearing installations, where the capacity would exceed 1,000 units on gley soils or 3,000 units on other soils and where units have the following equivalents;

1 pig = 1 unit
1 sow = 10 units.

2. Extractive industry

(a) Extraction of stone, gravel, sand or clay, where the area involved wold be greater than 5 hectares.

(f) All onshore extraction of natural gas; offshore extraction of natural gas where the extraction would take place within 10 kilometres of the shoreline.

3. Energy industry

(f) Installations for industrial briquetting of coal and lignite, where the production capacity would exceed 150 tonnes per day.

4. Processing of metals

(a) Iron and steelworks, including foundries with a batch capacity of 5 tonnes or more, and forges, drawing plants and rolling mills where the production area would be greater than 500 square metres (other than installations comprehended by Part I of this Schedule)

7. Food industry

(b) Installations for packing and canning of animal and vegetable products, where the capacity for processing raw materials would exceed 100 tonnes per day.

10. Infrastructure projects

(b) Urban-development projects which would involve an area greater than 50 hectares in the case of projects for new or extended urban areas, and an area greater than 2 hectares within existing urban areas.

(d) (i) construction of a new road (other than a motorway comprehended by the European Communities (Environmental Impact Assessment) (Motorways) Regulations, 1988 (S.I. No. 221 of 1988) of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area.

(iv) all aerodromes (other than aerodromes comprehended by Part I of this Schedule) with paved runways exceeding 800 metres in length.

11. Other projects

(c) Installations for the disposal of industrial and domestic waste with an annual intake greater than 25,000 tonnes (other than installations comprehended by Part I of this Schedule).

The terms "quantity, area or other limit" constitute the formal reference to the concept of criteria/thresholds, the other requirement for an EIS below the specified threshold being "that the development would be likely to have significant effects on the environment".

### (b) Comment on criteria/thresholds

In general, and having regard to views expressed by a variety of individuals and interest groups, it is considered that the criteria/thresholds are relatively "strict". Areas where the Regulations have most frequently been referred to as being "lax" relate mainly to agricultural and forestry developments.

Amongst the areas where difficulties in the interpretation of the Regulations have been

observed are the following:

- Confusion amongst local authorities, developers, the public, etc., as to whether projects not listed in Part II of the First Schedule to the 1989 Regulations may be required to submit an EIS. The DOE have confirmed that only projects of a "class" included in the Regulations may be subject to the requirement to submit an EIS. While projects below the specific threshold for a particular class may be requested to submit an EIS, projects not included in the list cannot legally be subjected to the EIS requirement.

- Confusion as to the interpretation of project definition. For Annex I projects, for example (Part I of First Schedule to the 1989 Regulations), the interpretation of an "integrated chemical installation" has been considered at EC level. For Annex II projects (Part II of First Schedule to the 1989 Regulations) urban development projects have given rise to some difficulty of interpretation. Urban development projects have been generally interpreted by local authorities, developers, etc., to include, for example, large housing estates, office and retail developments. The relevant threshold relates to "an area greater than 50 hectares in the case of projects for new or extended urban areas and an area greater than 2 hectares within existing urban areas". There are no criteria for distinguishing between "within" as opposed to "new or extended" urban areas and this has given rise to difficulty of interpretation in some cases. The construction industry has expressed concern over the inclusion of housing developments as an urban development project requiring an EIS.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

### (a) Number and categories of EISs

There has been a significant increase in the number of EISs since 1988, as compared with the 1985-1988 period which was governed by the 1976 legislation relating to EIA in Ireland. It is difficult to estimate whether the numbers of EISs will continue to rise or whether it will stabilise around the 1990 level of 70 estimated by the Environmental Research Unit as outlined

below.

The Environmental Research Unit (within DOE) is currently completing an inventory of environmental impact statements submitted between July 1988 and December 1990. Preliminary results from this survey (which is expected to be published) indicate:

**Numbers:**

There were a total of 123 EISs submitted between July 1988 and December 1990. Only ten of these were submitted to a government minister while 113 were submitted to planning authorities. The rate of submission appears to be increasing with 13 submitted in the second half of 1988, 40 in 1989 and 70 in 1990. A total of 29 EISs were submitted in Cork County (excluding the County Borough) during July 1988 - December 1990, seven of which were submitted in 1990.

**Length in pages:**

About a quarter of EISs are contained in each of the four length categories of up to 20 pages, 21 - 50 pages, 51 - 100 pages and over 100 pages.

**Types of development:**

Only three EISs related to projects covered by Part I of the First Schedule of the Regulations (two for motorway projects and one for a port project). The approximate breakdown of Part II projects is:

| | | |
|---|---|---|
| Agriculture | 12 | |
| Extractive industry | 19 | |
| Energy industry | 7 | |
| Processing of metals | 5 | |
| Chemical industry | 12 | |
| Food industry | | 11 |
| Textile, leather, wood, paper | | 4 |
| Infrastructure | 28 | |
| Other | 20 | |
| Modifications of Part 1 projects | 2 | |
| Total | 120 | |

The number of Annex I projects, totalling three, is relatively low and these types of projects are likely to arise relatively infrequently in Ireland. The remaining 120 projects are all Annex II projects.

**(b) Information specified in Article 5 and Annex III**

The information requirements are incorporated in the Second Schedule to the 1989 Regulations. The information is divided into:

(i) that which "shall" be contained (under item 2 of the Second Schedule) which corresponds with Article 5 of the EEC Directive.

(ii) that which "may" be included (under item 3 of the Second Schedule).

Alternatives, for example, are included within the "may be included" information category.

It seems unclear as to whether the division between "shall" and "may", as outlined in the Second Schedule, complies with the information requirements of Annex III of the EC Directive. DOE state that the "shall" element relates to Article 5 and that the remaining information requirements are optional. A similar position applies within the UK Regulations.

No comprehensive study of the content of EISs has been carried out in Ireland. There is considerable variation in range and quality of information considered within EISs. Competent authorities have specific power to request additional information on an EIS and have done so in a number of instances.

**(c) Making authorities' information available to the developer**

This requirement has not been written into the Regulations, presumably because it is anticipated that the proposed Environmental Protection Agency (a bill is currently before the legislature) will extend the availability of environmental information. DOE considers that the EC directive on freedom of environmental information will also ensure that this requirement will be adhered to. DOE states that no complaints regarding the making available of information by

authorities have been received to date. There appears to be no major concern among developers regarding the obtaining of information from environmental authorities where this is available. There is, however, a deficiency of available information in a number of areas.

**(d) Arrangements for publication of EIS**

The EIS is available for public inspection and/or purchase, following submission of a planning application or other application for authorization procedure. The fee may not exceed "the reasonable cost of making the copy". There appear to be no problems associated with high prices being charged to the public, EISs generally costing less than IR£20.00.

**(e) Arrangements for consultation and public participation**

Formal provision is made in the regulations for:

(i) Consultation with prescribed bodies. In the case of planning applications, for example, the following organisations must be forwarded a copy of the EIS, where appropriate, and comment invited.

- The Arts Council (An Chomhairle Ealaion)
- The Tourist Board (Bord Failte Eireann)
- The National Trust for Ireland (An Taisce)
- The National Monuments Advisory Council
- The Regional Fisheries Board

In certain other cases a copy of the EIS must be sent for comment to:

- The Minister for the Marine
- The appropriate Health Board
- The Commissioners of Public Works
- The Minister for Energy.

(ii) Consideration by the competent authority of "submissions and observations by persons other than the applicant" in the making of a decision on the project. This provides for extensive public involvement in the EIA process by individual interest groups, i.e. third parties. In the case of projects involving a planning application, third parties (as well as

the applicant) have the right of appeal to An Bord Pleanála (the Planning Board) at national level.

(iii) Notification of project applications/decisions. Provision for notification in the public press is made in respect of projects requiring an EIS, both at the application and decision stages.

In general, the arrangements for consultation and public participation are relatively extensive and appear to be working well in practice. A number of the prescribed bodies considered that there was need for additional staff to cope with the work load associated with implementing the EIA Directive.

**(f) Transborder impacts**

Provision for formal consultation between the Republic of Ireland and Northern Ireland is included in the Republic of Ireland Regulations. In practice, consultation has taken place, the only project to date being a new port at Lisahally, County Londonderry, where the Northern Ireland authorities forwarded a copy to the DOE in Dublin for comment. In 1990, Ireland signed the UN Convention on EIA in a Transboundary Context.

**(g) Role of EIS and consultation findings in project authorization**

The EIS is one of a number of considerations which must be taken into account in the making of a decision on a particular project. The "submissions or observations" of individuals or organisations who may have commented on the EIS must also be taken into account in the making of a decision. In the case of a planning application, for example, the statutory development plan and considerations relating to "proper planning and development", together with the EIS and submissions or observations on it would form the basis for a decision to grant, grant with conditions or refuse permission for a particular project.

There is no provision in the Irish Regulations for the issuing by the competent authority of any comprehensive statement as to the reasons for its decision other than that previously in operation under planning or other relevant legislation. There is no formal provision for the

making public of the "submissions or observations" which may have been made by third parties such as prescribed bodies or members of the public. It is difficult to evaluate the role of the EIS in project authorization in practice. A requirement that the competent authority publish a statement as to the reasons for its decision would be useful, as would making public all submissions and observations.

**(h) Modification of projects**

There is no firm evidence to date as to the influence of EIA on project decisions. EIA inevitably influences project design and increases awareness of environmental issues and is likely to influence locational decisions by developers. The relevant Minister has the power to modify a project in the certification procedure for public projects, e.g. roads/motorways.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO IRISH LEGISLATION AND PRACTICE

**(a) Measures to monitor implementation of Directive**

There are no formal measures in place to monitor the implementation of the Directive in Ireland. No single authority (including DOE) has to be informed of all EISs submitted, or forwarded a copy*. The Environmental Research Unit of the DOE is currently completing a study of EISs carried out over the 1988-1990 period, as referred to under 2(a) above.

**(b) Provision for scoping**

There is no formal provision for scoping in the Irish Regulations. Consultation on scoping generally takes place between the applicant and the competent authority and sometimes with other interest groups. There is a degree of confusion and uncertainty by competent authorities, developers and the public generally as to what information must be included in an EIS. This relates mainly to difficulties of interpretation of Annex III of the Directive as adopted under the Second Schedule of the 1989 Irish Regulations. The Bill proposing the Environmental Protection Agency contains provisions for the Agency to provide a scoping function through the preparation of general guidelines as to the information which EISs for various classes of projects should contain.

**(c) Quality of EISs**

There are no definitive data available to date on the quality of EISs. The quality of EISs varies considerably and there is a need for a comprehensive investigation of this area before any reliable comment could be made on quality and compliance with the statutory requirements in terms of content, etc.

**(d) Provision for formal review of adequacy and quality of EISs**

There is no formal review system provided for in the Irish Regulations. The proposed Environmental Projection Agency may have a role in this regard. The inventory of EIAs, being carried out by the Environmental Research Unit, as referred to under 2(a) above, is the only review study since the coming into operation of the Directive in July 1988[****].

**(e) Provision for monitoring and post-auditing**

There is no formal provision for monitoring and post-auditing in the Irish Regulations. Legal measures to ensure compliance with the terms of, for example, the conditions of a planning permission is provided for within existing planning legislation. (The cut-off point in the Irish Regulations is the decision stage of the EIA process.) As many projects which were the subject of an EIS under the Directive's requirements have not yet come into operation, it is difficult to predict the extent to which such projects will be monitored. The proposed Environmental Protection Agency will have a licensing and monitoring role in respect of air, water and noise impacts for certain projects.

**(f) Assistance to practitioners**

To date, DOE has issued the following guidance:

(i) "Implementation of EC Directive 85/337/EEC on Environmental Impact Assessment: Planning Applications and Appeals and Local Authority Development. Notes for the Guidance of Local Authorities", DOE, February 1990.

---

[****] Since this Annex was prepared, arrangements have been put in place for the ERU to be notified of all EISs on an ongoing basis. Most EISs are now available for consultation at the ERU library and at the Environmental Information Service.

(ii) "Notes for Road Authorities on The European Communities (Environmental Impact Assessment) (Motorways) Regulations 1988 and The Local Government (Roads and Motorways) Act 1974 (Prescribed Forms) (Amendment) Regulations 1988", DOE, September 1988.

A 1991 publication entitled "Environmental Impact Assessment - A Technical Approach", edited by Conor Skehan, Geraldine Walsh and Kevin Bradley, provides a general guide to the EIA process, scoping, etc., with particular reference to the Irish context. The DOE also provided a number of seminars to local authority staff within the past year. Eolas, the Irish Science and Technology Agency, has also organised about 4 public seminars within the past year. In general, there has been considerable interest in EIA from a variety of sources in Ireland, as reflected in the numbers of seminars, etc. Current provision for EIA training and guidance appears to be reasonably adequate.

**(g) Effect on timescale, costs, etc.**

There is no firm evidence to date as to whether the costs or timescale of projects involving EIA are being affected. Development interests have generally accepted or welcomed EIA, but are likely to express major concern if it results in extensive delays as these are already considered to be excessive within the project authorization process in Ireland.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

**(a) Provisions already made**

The DOE considers that the legal provisions are in complete compliance with Directive 85/337. There may be an issue as to whether the requirements of Annex III are fully met, in that the Second Schedule to the 1989 Regulations distinguishes between information which "shall" (Item 2) and which "may" be included (Item 3), as considered under 3(b) above. Other issues which have been raised in the context of formal compliance include the exclusion of the restructuring of land holdings from EIA control and the thresholds relating to forestry development, which are considered to be too high by some conservation interest groups. In practice, considerable attention is being given to EIA by local planning authorities, the public, etc.

(b) Ambiguities in the Directive

Issues such as scoping, the definition of projects such as "urban development projects", and the definition of impact areas such as "human beings" and "the cultural heritage" are giving rise to some uncertainty and confusion in some instances.

(c) Recommendations for more satisfactory, cost-effective compliance in Ireland

- A requirement that the competent authority publish a statement of the reasons for its decision would provide informative guidance on the role of the EIS in the decision-making process. For similar reasons the submissions or observations of prescribed bodies and the public generally should also be published with the decision.

- Production by the EC of formal guidelines on the Directive in terms of scoping, and the definition of impact terms such as "human beings" and "cultural heritage".

- Sharing of experiences of implementation with a selected number of other Member States through comparative seminars, conferences, etc. For example, a comparison of the operation of the Directive in Scotland and in the Republic of Ireland would be

## ANNEX FOR ITALY

### INTRODUCTION

The annex for Italy has been prepared using a variety of sources of information including consultation with the Ministry of the Environment, regional authorities, enterprises in the private and public sector which have undertaken EIA studies, consultancies and research institutes, environmental interest organisations and organisations involved in training programmes. The author is grateful for the many useful contributions to this annex, but emphasises that its contents are his responsibility and any views expressed are not necessarily shared by all of those consulted.

### 1. EXTENT OF FORMAL COMPLIANCE BY ITALY WITH THE REQUIREMENTS OF THE DIRECTIVE

#### (a) Principal legal provisions

Italy has made arrangements for environmental impact assessment (EIA) under Article 6 of Law n.349 of 8.7.1986 and through two Decrees of the President of the Council of Ministers: Decree n.377 of 10 August 1988 and the Decree of 27 December 1988.

Article 6 of Law 349 of 8 July 1986 (which established the Italian Ministry of the Environment) envisaged future provisions for the environmental impact assessment of certain projects and of the determination of their environmental compatibility. Such provisions consisted in a Decree of the President of the Council of Ministers that, on the proposal of the Minister of the Environment, indicated the projects to be subject to EIA procedure in a first 'experimental' phase; and in a follow-up bill that, based on the experience gained in the first application of the EIA procedure, would provide for the organic implementation of the directive.

Decree 377 of 10.8.1988 has required an EIA for certain private and public projects, with exemption for the following specific projects:

- Article 1 paragraph 2: renovation work and the addition of third lanes to motorways required for traffic safety or for the maintenance of operational levels.

- Article 1 paragraph 3: environmental improvement measures on existing power stations (even if such measures are accompanied by a rise in the power potential of the power station) if these will result in an improvement in environmental quality arising from reduced emissions.

The projects subject to an EIA, are those listed in Annex I of the Directive with the addition of certain dams and other installations (i.e. those designed to hold water or store it on a long-term basis with a height greater than 10m and/or with a capacity greater than 100,000 $m^3$). Decree 377 came into force with the publication of the Decree of 27.12.1988 which contained the technical regulations for the preparation of the environmental impact studies and for the formulation of the judgement of environmental compatibility.

The required coverage of the environmental assessment, in Italian legislation, includes all of the items in Article 3 of the Directive. Also, the information to be supplied by the developer covers the full requirements of Article 5 and Annex III.

Other projects subject to an EIA procedure are:

- projects for the realization of the inland waterway system (Law n.380 of 29 November 1990);

- completion and adjustment of the structures of the laboratory of nuclear physics of Gran Sasso (Law n.366 of 26 November 1990);

- State projects for the development of transit ports for goods, which are favourable for their intermodal movement (Law n.240 of 4 August 1990);

- projects for the reconstruction and the revitalisation of Valtellina and the contiguous zones of the provinces of Bergamo, Brescia, Como and Novara, affected by the exceptional atmospheric conditions during July and August 1987 (Law n.102 of 2 May 1990);

- power lines (Law n.9 of 9 January 1991)

A simplified EIA is envisaged for:

- some infrastructure projects, within the areas affected by the World Football Championship 1990 and by the Columbus celebrations 1992 (Law n.205 of 29 May 1990);

Most of the regions have prepared their own legal proposals for EIA, but they are awaiting the approval of the national framework bill (see below) before proceeding; meanwhile some regions

and provinces have, where they possess the necessary powers, enacted their own laws on EIA. These are Veneto Region, Autonomous Region of Valle d'Aosta, Autonomous Province of Trento, Autonomous Region of Friuli Venezia Giulia and Abruzzo Region.

The autonomous Province of Trento (Law n.28 of 29 August 1988) and the autonomous Region of Valle D'Aosta (Law n.6 of 4 March 1991) require EIA for both Annex I and Annex II projects. In the case of Annex II projects they have established thresholds. A complete EIA is required for all Annex I projects and some Annex II projects, whilst a simplified EIA is required for the remaining Annex II projects.

In the case of Valle D'Aosta Region, EIA also applies to plans and programmes. The Friuli Venezia Giulia Region (Law n.114 of 25 July 1990) has also introduced EIA for plans and programmes as well as for Annex I and Annex II projects. Thresholds will be established for Annex II projects.

The Veneto Region (Law n.33 of 15 April 1985), modified by Law n.28 of 23 April 1990) introduced EIA for Annex I projects and an evaluation of environmental compatibility for some projects in Annex II.

**(b) <u>Deficiencies in formal compliance and use of stricter rules</u>**

The 'experimental' phase of application of the EIA procedure, introduced with the previous mentioned provisions, has not yet been replaced by the organic provisions contained within the Bill n.5181, which is yet to be approved by the Parliament. Therefore, at the present, the principal deficiency in formal compliance with Directive 85/337/EEC is the incomplete application of the EIA procedure to Annex II projects.

As far as the information that the developer supplies is concerned, the Italian legislation is more demanding than the Directive. The developer must supply the following documentation:

- the environmental impact study (EI Study) arranged in accordance with the planning, designing and environmental reference frameworks defined in the decrees;

- the draft of the project;

- a non-technical summary useful for public information, and accompanied by easily reproducible graphs;

- the documentation which testifies the publication in newspapers of certain particulars relating to the project, in accordance with Article 1 paragraph 1 of the Decree of the President of the Council of Ministers, n.377/1988.

The impact study is to be accompanied by:

- suitable scale maps, both general and specific, thematic papers, technical papers, aerial photographs, tables, graphs and extracts, if any, and sources of references;

- any other documents that may be considered useful;

- an indication of the legislation in force and of the regulations relating to the sector concerning the construction and the management of the work, of the actions and consultations necessary for carrying out the operation, specifying those already done, and those to be done;

- a summary description of any difficulties, technical gaps or lack of knowledge encountered by the developer in the collection of the required data.

Italy has made legal provisions to comply with Article 6 subsections 1 and 2 of the EEC Directive. Stronger provisions currently exist in the case of electric power stations, as discussed later in this annex, and these will be extended to other projects in the new bill which is under discussion in Parliament.

Existing legislation does not include provision for the assessment of transborder impacts, but Italy has signed an international convention at Espoo, Finland (Convention on Environmental Impact Assessment in a Transboundary Context). The convention regulates the technical, administrative and diplomatic procedure for the EIA of certain projects which may have transborder impacts. The new bill will establish procedures to deal with these impacts.

In summary, Italian legislation lays down certain stricter rules, regarding scope and procedure, than those required by the Directive. These include:

- the establishment of an EIA Commission for the technical review of EIA studies (to be discussed later);

- the wide coverage of the documentation that is required to be submitted by the developer;

- the greater status of the judgement of environmental compatibility, based on the EIA study (as discussed later in this annex).

(c) Reasons for delay in full compliance

The principal reasons for the deficiencies and delays in achieving full compliance with the Directive are to be found in: the existence of many different authorities with competencies that might be affected by the introduction of EIA; the complexities of regional-central government relationships; and the reluctance among some of the interested parties to increase the scope of application to greater numbers of Annex II projects because of fear of delays this may cause within authorization procedures.

(d) Remedy of any remaining deficiencies

A new law proposal, n.5181, approved by the Council of Ministers, was presented to Parliament on 25 October 1990. Its main objectives are:

- the full implementation of Directive 85/337/EEC through the extension of EIA to the full range of Annex II projects (so far, as previously stated, EIA is only required for Annex I projects and for dams);

- the allocation of competences between the state and the regions (regions will be competent authorities for Annex II projects);

- the extension of the EIA procedure to sectoral and territorial plans and programmes;

- fuller provision for the supply of public information and for public participation. The public inquiry, currently only used for electric power stations, will be extended to all Annex I projects;

- rationalisation and better coordination of the EIA procedure with other authorization procedures to help in streamlining the process and avoiding delays;

- provision for the completion of the EIA procedure within 120 days.

To date (July 1991) this new Bill has not yet been approved by Parliament.

(e) Competent authorities

According to the existing laws the competent authority for the state EIA procedure is the Minister of the Environment. He expresses the judgement of environmental compatibility, based upon the EIA, in conjunction with the Minister of Cultural and Environmental Resources. The regional authorities have a consultative role within this procedure. A negative judgement of environmental compatibility means that the project has to be abandoned. Only the Council of Ministers can review this negative judgement and reverse it.

The evaluation of a project's EI Study is carried out by an EIA Commission, established in accordance with Article 18 paragraph 5 of Law 67 of 11.3.88. The Commission is also encouraged to prepare the draft judgement of its environmental compatibility.

The Commission consists of 20 members and is chaired by the General Director of the EIA Service of the Ministry of the Environment. According to Articles 3 and 5 of Law n.878 of 17 December 1986 its members are drawn from the universities, public bodies and public companies, and experts with relevant professional knowledge.

The main steps in the EIA procedure are the following:

- the developer submits the EI Study documentation to the Minister of the Environment, makes an announcement to this effect in national and local newspapers and deposits a copy of the EI Study documentation in the specified regional office;

- its technical review by the EIA Commission must be concluded, with an opinion on its environmental compatibility, within 90 days from the date of the presentation of the EI Study documentation. As part of the technical review, account must be taken of the opinion of the interested region and of the public's observations, and these must be sent within 30 days from the date of the announcement in the newspaper;

- The Minister of Cultural Heritage and Environmental Resources supplies his opinion;

- the decision on environmental compatibility is signed by the Minister of the Environment and by the Minister of Cultural Heritage and Environmental Resources;

- the final decision is communicated to the developer and to other competent authorities.

The developer has the opportunity, before the submission of the EI Study documentation, to inform the Minister of the Environment of the start of the environmental study. In such cases an informal consultation between the developer and the EIA Commission may take place on such matters as the scope of the Environmental Study. However, this is not a mandatory requirement.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

The new bill (n.5181) provides for the use of criteria and thresholds to determine which of the projects in Annex II are to be subject to EIA. Details of these will be contained in an Application Decree, following the approval of the bill.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

### (a) Number and categories of EIAs

From 1 January 1989 up to April 1991, 65 projects have been submitted to the EIA procedure. This includes those for which the procedure has been completed and those still under evaluation by the EIA Commission. The details are contained in Table 1. Of the total, 57% are accounted for by industrial installations, mainly disposal plants for toxic and harmful wastes, c. 10% by electric power stations, c. 27% by dams and c. 6% by other types of works.

### (b) Information specified in Article 5 and Annex III

The developer is required to provide in his EI Study documentation more information than that specified in the Directive (see 1(a) above). Since the start of the implementation of the legislation an improvement has been noted in the comprehensiveness of the information actually submitted. However, further improvements are still needed.

### (c) Making authorities' information available to the developer

The acquisition of data represents one of the most important issues for the quality of environmental impact studies. There are various reasons for this. One problem is a deficiency in

Table 1: Number of EI Study Reviews, Queries, etc., dealt with by the EIA Commission, up to 31 March 1991

| Project categories (Art. 1 DPCM 10 August 1988, n.377) | Technical Reviews of EI Studies | | | Queries as to whether the EIA procedure applies | Notification given by the developer of the commencement of EI Study |
|---|---|---|---|---|---|
| | Positive judgement | Negative judgement | In progress | | |
| Refineries and chemical plants | 1 | 0 | 0 | 6 | 0 |
| Thermal power stations | 4 | 0 | 3 | 0 | 0 |
| Storage of radioactive wastes | 0 | 0 | 0 | 0 | 0 |
| Motorways | 1 | 1 | 0 | 4 | 2 |
| Ports | 0 | 1 | 1 | 4 | 0 |
| Toxic waste disposal | 15 | 8 | 13 | 14 | 14 |
| Dams | 8 | 2 | 8 | 3 | 5 |
| Railways | 0 | 0 | 0 | 1 | 3 |
| Other | 0 | 0 | 0 | 2 | 0 |
| Total | 29 | 12 | 25 | 34 | 24 |

Technical Reviews

| Other project types not covered above | Concluded | In progress |
|---|---|---|
| Environmental improvement projects on existing power stations | 14[1] | 9 |
| Geothermic energy projects | 2[2] | 4[3] |
| | 16 | 13 |

[1] Projects for which exclusion from the EIA procedure has been verified because they involve, in any case, a reduction in the pre-existing emissions.

[2] Binding opinion.

[3] Research stage projects for which non-binding opinions will be given.

environmental base-line data collected, elaborated and organised on a continuous and reliable basis. The data already collected only cover scattered areas of the Italian territory. Where data do exist, it is not always easy to obtain access from the public or private organisation that holds it. When data are accessible, they may be stored in ways that are difficult to transpose for EIA use.

(d)(e) Arrangements for publication of EIS, and for consultation and public participation

As far as the consultation and the public participation are concerned, the existing arrangements foresee that the developer must (at the same time as the submission of the EI Study documentation to the Minister of the Environment):

- make an announcement in both national and regional newspapers indicating the type of project proposed, its location, and providing a summary description of its main features;

- deposit a copy of the EI Study documentation at the specified regional office.

In order to clarify the application of the rules relating to these arrangements, the Minister of the Environment issued a Circular on 11 August 1989.

Data and information which may be protected by provisions relating to industrial secrets are excluded from the publicity as referred to in Article 5 of Decree n.377 of 10.8.1988, and these may be transmitted in a separate envelope. However, developers so far have not exercised their powers to use this protective device.

According to Article 6 paragraph 9 of Law 349 of 8.7.1986, any citizen may present a petition, observations or views on a project undergoing EIA, within 30 days from the announcement of the submission of the EI Study documentation, to the Minister of the Environment, the Minister of Cultural and Environmental Resources and the interested region.

Whilst these arrangements provide the basis for some improvement in publicising the EIA study and in consultations based upon it some further strengthening is probably needed. At present, there are stronger procedures applied to thermoelectric and gas turbine power stations and here experience has been more positive. Under the provisions of the new bill, these procedures will be extended to all Annex I projects. The main features of this procedure, described in Annex IV of the Decree of 27.12.1988, are summarised in Table 2.

Table 2: Main elements in the EIA process for certain ENEL projects

1. ENEL (the national electrical power enterprise) informs the Ministry of the Environment, certain other Ministries, and the interested region, province and commune of the commencement of the environmental impact study and invites their preliminary observations.

2. ENEL subsequently submits the preliminary project documentation and the environmental impact study to each of them.

3. ENEL announces that this has occurred in a national newspaper and in a widely distributed local newspaper and the region, province and commune makes copies of the above documentation (including the study) available to the public.

4. The Minister of the Environment is then responsible for arranging the evaluation of the environmental impacts of the power station, carrying out the technical review and for a public inquiry. Thus:

   (a) he requests the opinions of those listed in 1. above, to be submitted within 90 days;
   (b) he requests the EIA Commission for a technical review; and
   (c) he arranges for a public inquiry to be undertaken, at the same time as the technical review is taking place.

5. The public inquiry is held in the local commune or the provincial capital. The independent Chairman is assisted by a number of experts. Written submissions from any member of the public are made within a 45 day period and the Chairman additionally may arrange meetings with those who have made submissions. The Chairman is required to submit his report to the Ministry of the Environment within three months of the original announcement in the newspapers.

6. Having received the responses under 4. and 5. above, the Minister of the Environment announces his decision on the environmental compatibility of the project. If there are conflicting views the President of the Council of Ministers will convene a meeting of the interested parties and it is only through this mechanism that an unfavourable judgement on environmental compatibility can be over-turned and the project allowed to proceed.

Additionally, the Bill also proposes to make more efficient the procedure in the case of Annex I projects, foreseeing a fund at the disposal of the EIA Commission and of the regions expressly designed to facilitate their participation. Also, through the provisions of Law n.142 of 8.6.1990 (Reform of Local Bodies), Law 241 of 7.8.1990 (New Rules concerning the administrative procedure and access to administrative documents) and Directive 90/313/EEC on Freedom of Access to Information on the Environment, access to EIA information in general should be further improved.

(g) Role of EIS and consultation findings in project authorization

The EIA procedure is a new procedure. When the final decision is taken and is positive the developer must apply to get the other authorizations necessary to carry on with the project. This process of securing the other authorizations is beneficially affected by a positive judgement of environmental compatibility. Once the final decision on environmental compatibility has been taken, this is usually published in a magazine (VIA), to enable others to be informed. Anyone may ask to consult the relevant documents available to the Ministry of the Environment, and the regional offices indicated in the Circular of 11 August 1989.

(h) Modification of projects

Projects, as a result of undertaking EIA, have in certain cases been modified at the design stage and, in other cases, the modification has resulted in a different plant layout.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO ITALIAN LEGISLATION AND PRACTICE

(a) Measures to monitor implementation of the Directive

The Ministry of the Environment keeps a record of all environmental impact studies and categorises them according to type of project (see Table 1).

(b) Provision for scoping

There are no formal/mandatory provisions for scoping an assessment. However, before the submission of the environmental impact study consultations between the developer and the EIA Commission have often been carried out. Experiences of such consultations have shown them to be very helpful.

(c) Quality of EISs

There has been an improvement of the quality of the environmental impact studies since the date of the implementation of the existing legislation. There had been, in previous studies, some problems of incompleteness and bias but the activities of the EIA Commission have helped to reduce these difficulties.

(d) Provision for formal review of adequacy and quality of EISs

The formal review of the adequacy of the quality and so of the completeness of the environmental impact studies is performed by the EIA Commission. The law establishes that if the

study does not provide the minimum elements necessary to understand the comprehensive relationships between the project and the environment, the Commission may ask for more information. This request has the effect of a negative interlocutory opinion. If the study is considered adequate, the Commission expresses its view on environmental compatibility using a number of criteria. However, these environmental compatibility criteria have not yet been published because they are being evolved through experience and may vary from one situation to another. Some of the criteria being used are:

- established Italian standards;
- international standards (e.g. WHO criteria, EPA criteria);
- existing environmental quality in the affected area;
- observations and concerns expressed by the public;
- nature of the endemic species in the affected area.

(e) Provision for monitoring and post-auditing

When the final decision on the environmental compatibility of the project is taken by the Minister of the Environment, some consent conditions may be attached and provision for the establishment of a monitoring network, covering the most important environmental parameters, may be included with these.

(f) Assistance to practitioners

The Ministry of the Environment, in order to assist in the implementation of EIA, has produced:

- technical regulations for the preparation of environmental impact studies (Decree 27.12.1988);

- Circular 11 August 1989 which clarifies the application rules relating to announcements in newspapers;

- Circular 12 July 1990 and Circular 8 April 1991 which provide some clarification relating to the definition of 'waste disposal installations for incineration of chemical treatment or landfill of toxic and harmful wastes'.

A guide relating to EIA of waste disposal is in preparation.

The Ministry of the Environment published, in 1990, the first inventory of training activities in the environmental field. This is very helpful to all operators in the environmental sector and to all who wish to be informed on the current supply of environmental training facilities.

Since the existing EIA legislation came into force there has been an increase in the supply of training courses on EIA. The length of these ranges from one to two weeks and more. The courses are organised by universities, private and public organisations. However, there is still a need for greater provision of more practical EIA training using, for example, real world case studies.

Additionally, there is a need for guides and/or manuals on EIA. Practical guidance would also be helpful on how to prepare high quality, non-technical EIA summaries, given their importance. The wider availability of good quality EIA studies would be very useful in helping to disseminate best EIA practice.

(g) Effect on timescale, costs, etc.

As far as the costs or timescales associated with the EIA of projects are concerned, these depend mainly on the type and size of the project. One important consideration is the amount of work involved in reviewing the state of the base-line environment. For fixed installations a significant fraction of the total cost of the environmental assessment itself may, for example, be needed to determine quantitatively the air or water quality that will be affected by the project. For linear infrastructures (motorways, railways, etc.) a significant part of the cost of the environmental impact study is represented by the 'assessment' of the base-line ecosystem, such as vegetation and fauna, along its route. The subdivision of the area affected by the project into very small sections may require a detailed analysis which, in certain cases, can take a number of months.

For both the before mentioned categories of projects, the cost of the study expressed as a percentage of the capital cost tends to decrease as the capital cost increases. The costs for some linear infrastructures and power stations may be as low as 0.1 - 0.5% of capital costs. For some waste disposal schemes of low capital cost the environmental study could exceed 1% of the capital costs.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

### (a) Provisions already made

The EEC Directive 85/337, as stated previously, has only been introduced so far for projects in Annex I, with the addition of dams. The great majority of Annex II projects are not yet covered by the existing legislation and this is an important deficiency. The new framework bill under discussion in Parliament is intended to remedy this. Since the existing legislation came into force (January 1989-March 1991) approximately 65 projects have been subjected to EIA.

The EIA procedure constitutes a strong innovative instrument within the Italian administrative system. The reasons for this are:

- it requires that the environmental effects of projects are taken into account from the earliest stages of their siting and design;

- it introduces a very new system of public information and consultation;

- it requires quantitative information on the environment in order to avoid decisions being based upon too generalised and imprecise information;

- it may, however, by introducing a new procedure, over-burden or duplicate review procedures and inquiries if these are not all strictly coordinated.

### (c) Recommendations for more satisfactory, cost-effective compliance in Italy

So far as the public consultation and participation are concerned, in recent years it has been possible to obtain positive results from the use of the public inquiry in the case of power station projects. The new bill on EIA provides the opportunity to extend this provision to all Annex I projects. Some difficulties have been met in the collection of data for the base-line description of the environment. Sometimes a systematic, comprehensive and consistent

set of data do not exist. Sometimes, also, it is difficult to know what information is available and who is in possession of it.

The provision of guides or manuals on how to prepare an environmental impact study (possibly for each major category of project) and of guidance on how to prepare non-technical summaries would be very helpful.

The new bill, once approved, should allow a further significant step to be taken in getting both more satisfactory environmental protection and a rationalisation of the different authorization procedures for projects subject to EIA in Italy.

APPENDIX

National and regional legislation on EIA in Italy cited in the text

- Law n.349 8 July 1986, establishing the Ministry of the Environment and Regulations Governing Environmental Damage.

- Decree of the President of the Council of Ministers n.377 10 August 1988. Regulations governing rules on environmental compatibility in accordance with Article 6 of Law n.349, 8 July 1986.

- Decree of the President of the Council of Ministers 27 December 1988. Technical regulations for drawing up environmental impact studies and the formulation of the judgement of environmental compatibility in accordance with Article 6 of Law 8 of 8 July 1986, n.349, adopted in accordance with Article 3 of the Decree n.377 of 10 August 1988.

- Circular 11 August 1989: 'Publicity of the actions concerning the request for a judgement of environmental compatibility according to Art. 6 of Law n.349 of 8 July 1986; arrangements for the announcement in the newspapers.

- Law n.380 of 29 November 1990. Projects for the realization of the inland waterway system.

- Law n.366 of 26 November 1990. Completion and adjustment of the structures of the laboratory of nuclear physics of Gran Sasso.

- Law n.240 of 4 August 1990. State projects for the development of transit ports for goods, which are favourable for their intermodal movement.

- Law n.102 of 2 May 1990. Projects for the reconstruction and the revitalisation of Valtellina and the contiguous zones of the provinces of Bergamo, Brescia, Como and Novara, affected by the exceptional atmospheric conditions during July and August 1987.

- Law n.9 of 9 January 1991. Extension of EIA procedure to power lines.

- Law n.396 of 15 December 1990. Projects for Rome, capital of the Republic.

- Circular 30 March 1990. Application of the EIA procedure to ports in the second category of class II, III and IV and, in particular, touristic ports. Article 6(2) of Law n.349 of 8 July 1986 and Decree n.377 of 10 August 1988.

- Circular 12 July 1990. Applicability of EIA to landfill of category 2a type B.

- Circular 8 April 1991. Judgement of environmental compatibility for projects of waste disposal of toxic and harmful wastes falling within the emergency programme according to article 5 of Law Decree 397 of 1988 arising from the Law n.475 of 1988.

- Law proposal n.5181 presented to Parliament on 25 October 1990: 'Regulations concerning the EIA procedure' as a Government initiative.

- Law n.205 of 29 May 1989: concerned with infrastructural interventions within the areas affected by the World Championship 1990.

- Law n.142 of 8.6.1990: Reform of local bodies.

- Law n.241 of 7.8.1990: New rules concerning the administrative procedure and access to administrative documents.

- Autonomous Province of Trento - Law n.28 of 29 August 1988.

- Autonomous Region of Valle D'Aosta - Law n.6 of 4 March 1991.

- Autonomous Region of Friuli Venezia Giulia - Law n.111 of 25 July 1990.

- Veneto Region - Law n.33 of 16 April 1985 modified by Law n.28 of 23 April 1990.

- Abruzzo Region - Law n.66 of 9 May 1990.

Other sources

Ministry of the Environment (1990) Information on Activities in Environmental Training, Ministry of the Environment, Rome.

AA.VV. 'Atti del Convegno: l'analisi ambientale in Italia: problemi e prospettive', FAST, 1-2 February 1990, Venezia.

AA.VV. 'Atti del Convegno: l'analisi ambientale in Italia: casi concreti, costi, opinione pubblica', FAST, 7-8 February 1991, Milano.

## EIA REGULATORY DEVELOPMENTS JULY 1991 - MARCH 1992

- Decree of 22 October 1991. Implementation of the procedure arising from the Law n.240 of 4 August 1990.

- Circular 14 November 1991. Application of EIA procedure - article 6, Law n.349 of 1986 - to harbour projects.

- Decree of November 1991. Provisions for projects of disposal plants of toxic and harmful wastes.

- Law n.412 of 30 December 1991. Provisions in terms of public finance.

- Law n.220 of 28 February 1992. Interventions for the protection of the sea. Requires EIA for terminals dealing with hydrocarbons and dangerous substances; mining of the continental shelf; placement of sub-marine pipelines for hydrocarbons and dangerous substances; and plants for the treatment of ballast sludges and washing water of tankers transporting hydrocarbons and dangerous substances.

## ANNEX FOR LUXEMBOURG

### INTRODUCTION

This annex has been prepared using a variety of sources of information including consultations with the Ministry of Territorial Planning and the Environment, Administration of the Environment, Ministry of Agriculture, and Mouvement Ecologique asbl/Oeko-Fonds asbl. The authors are grateful for the useful contributions they have received but emphasise that the content of this annex are solely their responsibility and that any views expressed are not necessarily shared by all of those consulted.

### 1. EXTENT OF FORMAL COMPLIANCE BY LUXEMBOURG WITH THE REQUIREMENTS OF THE DIRECTIVE

#### (a) Principal legal provisions

Directive 85/337/EEC has still not been incorporated completely into Luxembourgish legislation even though the time within which to achieve this expired on 3 July 1988. The procedure of environmental impact assessment is nevertheless, to some extent, already part of the Luxembourgish legal system. EIAs (Environmental impact assessments) are carried under the terms of:

- the *law of 9 May 1990 concerning the control of dangerous, dirty and noxious installations* ("commodo-law", annex 1; a recent reform of the law of 16 April 1979). Article 6 provides that an assessment of the possible effect on the environment may be required for all industrial, craft or commercial establishment/projects, whether public or private, and all manufacturing installations or processes, whose existence, operation or bringing into service could result in danger or inconvenience, especially to the environment.

  The commodo-law is the principal authorization procedure for establishments, which are divided into three classes. The competent authorities responsible for granting authorizations differ according to the class of establishments. For class 1 establishments, the Ministry of Labour is responsible for aspects concerning the protection of workers,

whereas the Ministry of Territorial Planning and the Environment is responsible for all environmental aspects. Class 2 establishments are authorised by the mayor of the concerned commune, whereas Class 3 establishments have to be authorised by the two above mentioned ministries through a simplified procedure - and without public inquiry. Class 1 and class 2 projects have to pass through a public inquiry before the final decision of the permitting authority. The authorization fixes the restrictions on, and conditions of, operation which are considered necessary in the interest of safety, cleanliness or convenience, as well as in the interest of the environment.

The commodo-nomenclature includes all Annex I-projects and the majority of Annex II projects apart from land consolidation projects in rural areas, reafforestation and town planning projects.

- the *law of 11 August 1982 regarding the protection/conservation of nature and natural resources* Article 9 states that all proposed developments or projects outside built up areas which are likely to damage the environment, owing to their size or effect on the natural environment, can be made subject to an impact study.

In these two cases the Ministry of Territorial Planning and the Environment is the competent authority to decide the necessity of an impact assessment.

- the *law of 16 August 1967 concerning the creation of a communication network, modified on 31 August 1986* requires (Article 14) that every new road building project is made subject to a previous evaluation assessment stating the possible effects on the human and natural environment.

**(b) <u>Deficiencies in formal compliance</u>**

The main deficiencies are:

- no provision requiring a mandatory EIA for Annex I projects; only road building projects mandatorily require an EIA;

- there are no precise indications in the existing legislation described above detailing the required contents of impact assessments;

- the publication of the EIS (environmental impact study), the consultation/public participation as well as the publication of the decision is only prescribed for projects that are covered by the commodo-law (Class 1 and 2 projects); for road building projects, as well as projects covered by the law of protection of the nature, such provisions are deficient;

- no provision is made relating to transboundary information/cooperation, in accordance with Article 7 of the Directive.

**(c)(d) Reasons for delay in full compliance; remedy of any remaining deficiencies**

Luxembourg intends to implement Directive 85/337/EEC by approving separate, new regulations. The aim is to integrate impact evaluation into existing authorization procedures.

The Luxembourg government has prepared a bill to implement Directive 85/337/EEC ("Projet de loi no.3257 du 20 septembre 1988 concernant l'évaluation des incidences sur l'environnement de certains projets publiques et privés"). The delay in elaborating this draft legislation is above all due to the competing competences of the various ministerial departments involved.

The bill was submitted to Parliament in 1988 but has not yet been passed. Indeed, the Council of State, which had to provide a statement about the bill, rejected the text. The Council of State objected that the draft legislation overlapped too much with the existing provisions of the "commodo-law" (authorization procedure for dangerous, dirty and noxious installations) and proposed that a text, covering only those aspects of the EIA Directive that had not been implemented in Luxembourg legislation, should be prepared.

In conformity with this view, and under pressure from the European Commission, the Ministry of the Environment, prepared a new draft regulation (projet de règlement grand-ducal

concernant l'évaluation des incidences sur l'environnement de certain projets publics et privés) that might be passed through a "procédure d'urgence". This was submitted to Parliament early in May 1991. The competent authorities hope that the draft regulation will be adopted during 1991.

The text of the new draft regulation covers all those provisions that are known to be deficient in Luxembourgish law: i.e. Annex I, content of EIA, transboundary information and cooperation, EIA procedure and public participation for road building projects (as previously discussed).

Projects which in every case will require environmental assessment are listed in Annex I of the draft regulation which corresponds to Annex I of the Directive. The majority of Annex II projects (in the Directive) are listed in the nomenclature of classified projects (commodo-law) for which an EIA may be required by the permitting authority. The principal exemptions are: land consolidation, afforestation and urban planning projects. For these three categories of projects, the Ministry of the Environment intends to prepare special regulations. Projects associated with national defence will be excluded from EIA requirements.

Where the requirement for environmental assessment applies, the developer will be required to provide information about the environmental effects of the project. The form of this information is set out in detail in Annex II of the draft regulation.

Regarding information to, and consultation of, neighbouring states on projects causing transboundary effects, the draft legislation will implement the basic requirements of Article 7 of the Directive.

The draft regulation establishes detailed provisions for road building projects. In the first stage the developer has to furnish an impact assessment dealing with the "suitability" of the project and the choice of possible alignments. The chosen line is then made subject to a further impact assessment. These EISs are made available to the public - the relevant provisions corresponding to those of the commodo-law.

A third impact assessment stage deals with compensating measures to avoid or reduce possible effects of the project. This last environmental impact report is subject to a public inquiry.

**(e) Competent authorities**

The competent authorities are the respective permitting authorities:

- Ministry of the Environment (nature protection law, communication network law);
- Ministry of the Environment/Administration of the Environment, (commodo-law, class 1 and 3 projects);
- concerned Communes (commodo-law, class 2 projects).

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

**(a) Existing practice**

For projects covered by the commodo-law (the area of application comprises all projects of Annex I (EC-Directive) as well as the majority of those projects mentioned in Annex II), the developer has to provide - within the framework of the authorization application (dossier) - a summary assessment, which describes the relevant environmental parameters and effects of a project. For the purpose of this preliminary overview, the competent authority has prepared checklists for different categories of projects. These checklists include qualitative and quantitative inventories of the main sources of emissions (water, air, waste and noise), a description of the production process, the raw materials used, intermediary and final products, a short assessment report and the treatment technologies envisaged, as well as a map (1:200). This report covers the exploitation phase of the project as well as its construction phase.

On the basis of this report the competent authority has to decide whether or not a detailed EIA should be prepared. Thresholds or criteria which could facilitate the decision of the authority, in this respect, are not laid down.

In practice, all 'large scale' projects are subjected to an impact study (e.g. new industrial

establishments, industrial sites, waste treatment sites, roads, etc.).

**(b) New draft regulations**

It is intended that an EIA will be mandatorily required for all projects of Annex I to the EC-Directive. In the case of Annex II projects, the competent authority must decide on the necessity of an EIA on a case-by-case basis. The decisive criterion to determine the question is whether a project can be expected to have significant effects on the environment by virtue of its nature, characteristics, size or location.

The "projet de règlement grand-ducal" does not contain more detailed criteria or thresholds, such as technical or financial ones which could facilitate the decision of the authority. According to the Ministry of the Environment the establishment of such criteria or thresholds is not envisaged.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

**(a) Number and categories of EIAs**

According to the competent authorities, approximately 10-20 EIAs (in the sense in which the term is used in the Directive) are undertaken annually in Luxembourg.

The principal project categories within which most of these assessments take place are:

- road projects;
- industrial sites;
- new industrial installations; and
- leisure projects (golf courses, etc).

In addition, up to 100 environmental impact summary reports ("notice d'impact") (see section 2 above), which result from a simplified assessment procedure, are carried out annually.

Land consolidation projects in rural areas are generally accompanied by "ecological inventories" which examine the initial state of the concerned area and identify biotopes that require special protection or conservation. These inventories are required by the Ministry of Agriculture and the Ministry of the Environment. They are carried out by private experts and institutions. Although a public inquiry is not carried out, the concerned land owners are involved in the planning process. According to those involved in preparing such inventories, the good will of the competent authorities to find compromise solutions designed to protect biotopes on the basis of these ecological inventories is, in general, evident.

**(b) Information specified in Article 5 and Annex III**

The developer of a project is responsible for carrying out the impact study but, in general, a private organisation or expert (Luxembourgish or foreign expert) is contracted by him to undertake the study.

There are no precise indications in the existing legislation detailing the required contents of impact assessments. Nevertheless for some categories of projects, the competent authorities have prepared project-specific checklists ("cahiers des charges-type"). Luxembourg uses the content requirements of the EC-Directive, as specified in Article 5 and Annex III, as a basis for its project-specific checklists. Even though the developer is responsible for the performance of EISs, the permitting authority may influence the content of the studies via the checklists.

The possibility of examining *alternatives* depends largely upon the category of the project:

- for road building projects the consideration of alternatives is practised. In the first stage different possible alignments and their effects on the environment are examined; and the chosen line is then subjected to a detailed study;
- in the case of new industrial installations, alternatives are often not taken into account because sites are chosen in advance. In this case the principal objective of an EIS is to "save" the chosen site: it therefore identifies measures to avoid, reduce and remedy adverse effects of the project at that site.

(c) Making authorities' information available to the developer

According to the competent authorities, there are no problems in the area of the supply of information relevant to the EIA, by the authorities to developers. Existing information, studies (biotope maps, cartographic material, aerial photographs, etc.) are made available to the developer and/or his experts.

(d)(e) Arrangements for publication of EIS; arrangements for consultation and public participation

The possibilities for public participation vary according to the category of project.

For projects requiring an authorization under the commodo-law, the introduction of EIA within this procedure ensures extensive public participation. Authorization applications are posted for a period of 15 days in the commune in which the establishment is to be located, as well as in neighbouring communes within a radius of 200m from the establishment. Notices must be simultaneously posted at the town hall and, in a very visible position, at the site of the proposed establishment. From the date when these notices appear, the application and the impact assessment study are placed on view and can be consulted by all interested parties at the at the town hall of the commune in which the proposed establishment is to be located.

In addition, locations with more than 5000 inhabitants, authorization applications for class 1 and 2 establishments are brought to the attention of the public by the publication of extracts in at least four daily newspapers printed and published in the Grand-Duchy. The publication costs are paid by the developer.

After a period of 15 days, the commissioner for the inquiry collects the written observations and proceeds with a public hearing ("enquête de commodo et incommodo") in the commune concerned, which any interested party may attend. The findings of the inquiry are summarised in a written report by the commissioner for use by the competent authority. The term 'interested party' is not a restrictive term in Luxembourgish law. Every interested person and organisation - Luxembourgish or foreign - may participate in the public inquiry procedure.

For large scale projects, like waste disposal sites, the organisation of public hearings

during which details of the projects and the results of impact studies are discussed with the interested public is general practice.

For road building projects and projects covered by the law relating to the protection of nature and natural resources, a public participation procedure as described above is not practised for the moment. According to the Ministry of the Environment, information regarding the project and copies of the impact assessment study are supplied upon request. However, through the new "projet de règlement" (Article 10) it is intended to prescribe a public participation procedure, similar to that provided under the terms of the commodo-law, for every road building project.

**(f) Transborder impacts**

The possibility to grant foreign citizens and organisation rights to participate within the framework of the 'public inquiry', in the specific case of projects with transboundary effects, is not mentioned in existing law. However, the proposed regulation (projet de règlement) intends to implement the minimum requirements of Article 7 of the Directive.

In Luxembourg it is already general practice to provide the competent authority of the neighbouring states with relevant information on projects located in the border area, where these may have transboundary effects. It is then at the discretion of the informed neighbouring authority to inform its own citizens. According to the Ministry of the Environment, citizens and environmental groups from neighbouring states have the right to participate in the public inquiry, as described above.

**(g)(h) Role of EIS and consultation findings in project authorization; modification of projects**

Concerning the linkage of EIA and decision making, permitting authorities have a wide measure of discretion in Luxembourg. It is for them to decide the final conclusions they will draw from the EIA study. A negative environmental impact evaluation does not necessarily lead to a negative decision from the granting authority. This applies also to the report on the result of the public inquiry and the final conclusions drawn from the public inquiry by the

commissioner of the inquiry. There are no legal requirements that the competent authority has to refer to the results of the EIA in justifying its decision.

According to the permitting authorities, the text of the authorization that fixes restrictions and conditions of operation does refer - as far as environmental matters are concerned - to the respective parts of the EIS. In this way, the following up on the implementation of the decision steps may be facilitated in some cases.

Until now there has been no case in which a proposed project had been stopped because of the results of an EIS. Nevertheless, modifications to submitted projects are being observed. This is especially true for road building projects. For example, following objections in the EIS, sections of lines have been constructed in tunnels, biotopes have been conserved, etc.

The authorization decisions are posted up, for forty days, by the communal authorities in all the communes involved. During this time the public may also consult the text of the decision at the town hall of the commune.

The draft legislation (Article 8) intends to implement the minimum requirements of the directive (Articles 8 and 9).

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO LUXEMBOURG LEGISLATION AND PRACTICE

### (a) Measures to monitor implementation of Directive

Due to the limited area of the country, it is possible to achieve close contact between ministerial administrations and territorial administrations and monitoring of practical application of regulations and their effects is facilitated by this. No formal provisions, beyond this, are envisaged for monitoring the implementation of the Directive.

### (b) Provision for scoping

For different categories of projects the competent authorities have worked out, or are working out, project-specific checklists ("cahiers des charges-type"). These project-specific

checklists provide references concerning the content and the methodology of the EIS (see also 3b). They also serve as a basis, for a more detailed determination of the content and methodology, in discussions between the developer and the competent authority.

In this context, it should be pointed out that the Administration of the Environment contacts the promoters of new industrial installations before any decision to start the official authorization application procedure is made.

A scoping process, involving other authorities and the public in an early stage, is not provided for nor envisaged in the new draft regulation.

(c) Quality of EISs

EISs are prepared by environmental experts so that a certain quality is, in general, achieved. Most of the impact assessment studies of large-scale projects are performed by German, French or Swiss experts. In these countries experience with EIAs is much more developed than in the Grand-Duchy.

The Ministry of the Environment has observed the following deficiencies:

- lack of a detailed examination of alternatives (which is frequently considered to be at the heart of EIA) for a number of categories of projects. For new industrial installations, for example, the location of the site is often already determined before starting the authorization procedure (see also 3b);

- in forecasting the possible effects which a project is likely to have on the environment.

(d) Provision for formal review of adequacy and quality of EISs

EIA studies are required by the competent authority. Until now there has been no case in which such a study has been totally rejected by a competent authority. However, if it contains incomplete or imprecise information, or results, the competent authority should order further investigations. Prior consultation of other authorities or further persons/institutions of special

scientific and technical expertise is not practised. Formal provisions relating to the approval of EIA studies do not exist.

(e) Provision for monitoring and post-auditing

The commodo-law provides for the monitoring of authorised projects. This enables the competent authority to review the developer's compliance with the requirements and conditions concerning environmental protection as stipulated in the permission. The decision can be revised if negative effects occur which had not been foreseen. If a project is realised without development consent, or if the conditions attached to the permission are not fulfilled, an immediate stay of execution can be ordered (Article 22 commodo-law).

The agents for these monitoring tasks are engineers within the Administration of the Environment. Because of a shortage of personnel, the means of undertaking these tasks for authorised establishments are limited in practice.

(f) Assistance to practitioners

No special EIA training has been organised. Given the size of the country there are only 3-5 officers concerned with EIA at the administrative level. The EIA studies are prepared by private experts who are themselves responsible for their own training requirements.

(g) Effect on time-scale, costs, etc.

In the case of road building projects, the Ministry of the Environment states that the effect on the time-scale is not too significant due to the stringent organisation of procedures. The impact assessment is divided into stages - (examination of alternatives, evaluation of the impact of the retained line, and, proposed of measures to avoid, reduce or remedy significant adverse effects) - and, in this way, the different decision phases are coordinated with the different EIA stages.

For authorization procedures of new industrial installations the time-scale of the procedure is generally prolonged by 3 to 6 months (according to the Administration of the Environment) as a result of undertaking an EIA, if the EIA is not commenced sufficiently early. On the other

hand, the authorization procedure (particularly the decision procedure and the fixing of conditions) may be accelerated with the help of a good EIA study. Due to the provision of high quality and transparent information, the public participation/inquiry may proceed with less opposition and, in most cases, alternative statements may be unnecessary.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

### (a) Provisions already made

In the light of the above analysis, there are some important provisions of the Directive that are not yet implemented in national legislation (see also section 1b). These principally relate to:

- content of EIA;
- Annex I projects;
- transboundary information and consultation in the case of projects causing transboundary effects;
- public participation for road building projects and projects covered by the nature protection law.

Luxembourg intends to implement these elements with the help of new regulations (see also section 1c/d).

### (c) Recommendations for more satisfactory, cost-effective compliance in Luxembourg

In general, precise checklists do influence the quality of EISs and good EISs push ahead the authorization procedure. In this sense a project relevant determination of the content/checklist (subject, scope and methods) help to focus the analysis on the relevant

issues. Furthermore, the participation of other authorities and the public in this process can be useful to avoid public conflicts at the permitting stage.

## REFERENCES


Coenen, R. and Jörissen, J. (1989) Environmental impact assessment in the Member Countries of the European Community. Implementing the EC Directive: An Overview Karlsruhe.

DocTer (1990) European Environmental Yearbook London.

Hermann, B. and Kneesch, P. (1991) "Implementation of the EC Directive on EIA in Luxembourg". In Environmental Impact Assessment Training and Research in the European Communities Wood, C. and Lee, N. (Eds.) Occasional Paper 27, Department of Planning and Landscape, University of Manchester, Manchester.

Ministère de l'Amenagement du Territoire et de l'Environnement (1990) Rapports d'activité 1989 Luxembourg.

Petit, C. (1988) "L'étude d'impact de la section II de l'autoroute Luxembourg-Trèves. In Dossier RED 88/1 Etude d'impact en milieu rural. Attert.

Raum-Degreve, R. (1988) "La participation publique et le rôle de l'information, de la sensibilisation et de la formation dans le cadre des études d'impact. In Dossier RED 88/1 Etude d'impact en milieu rural. Attert.

Raum-Degreve, R. and Kneesch, P. (1990) "Application de la directive communautaire relative aux études d'impact au Grand-Duché de Luxembourg". In Review of the European Environmental Impact Assessment Directive Implementation in the EEC Member States IUCN/CEPLA Report, Bonn.

Suetens, L.P. and Soetemans, D. (1982) The law and practice relating to pollution control in Belgium and Luxembourg, Graham and Trotman, London.

## APPENDIX

**List of the principal legislation relating to the Directive's implementation in Luxembourg**

Laws

- Loi du 9 mai 1990 relative aux établissements dangereux, insalubres ou incommodes (Mém. A 1990, p.310)

- Loi du 11 août 1982 concernant la protection de la nature et des ressources naturelles (Mém. A 1982, p.1486)

- Loi du 16 août 1967 ayant pour objet la création d'une grande voirie de communication et d'un fonds des routes - modifiée le 31 août 1986 (Mém. A 1967, p.1967; Mém. A 1986, p.1937)

- Loi du 26 juin 1980 concernant l'élimination de déchets (Mém. A 1980, p.974)

- Loi du 12 juin 1937 concernant l'aménagement des villes et autres agglomérations importantes (Mém. A 1937, p.583)

- Loi du 20 mars 1974 concernant l'aménagement du territoire (Mém. A 1974, p.310)

Regulations

- Règlement grand-ducal du 18 mai 1990 déterminant la liste le classement des établissements dangereux, insalubres ou incommodes (Mém. A 1990, p.316)

- Règlement grand-ducal du 18 mai 1990 portant désignation des experts et agents chargés de rechercher et de constater le infractions aux dispositions légales et réglementaires en matière d'établissements classés (Mém. A 1990, p.328)

Draft legislation

- Projet de loi no 3257 concernant l'évaluation des incidences de certains projets publics et privés (dépôt: 20.9.1988)

- Projet de règlement grand-ducal relatif aux projets soumis à une évaluation des incidences sur l'environnement (dépôt: 20.9.1988)

- Projet de règlement grand-ducal relatif à l'enquête publique et à la publicité des décisions administratives en matière d'évaluation des incidences sur l'environnement (dépôt: 20.9.1988)

- Projet de règlement grand-ducal concernant l'évaluation des incidences sur l'environnement de certains projets publics et privés (dépôt: mai 1991).

## ANNEX FOR THE NETHERLANDS

### INTRODUCTION

The performance of the Dutch environmental impact assessment system has been studied by the 'Evaluatie Commissie Wet algemene bepalingen milieuhygiëne' (Evaluation Commission on the Environmental Protection Act) ECW[5]. This committee advised the Minister of Housing, Physical Planning and the Environment and the Minister of Agriculture, Nature Management and Fisheries on the working of environmental impact assessment in September 1990. This advice was mainly based on three background studies. In this annex the findings of the ECW are regularly referred to. A number of interviews with government departments, developers, consultees, and interest groups, were also carried out by the author as part of those studies. These are listed in the appendix to this annex.

### 1. EXTENT OF FORMAL COMPLIANCE BY THE NETHERLANDS WITH THE REQUIREMENTS OF THE DIRECTIVE

#### (a) Principal legal provisions

To implement EC Directive 85/337/EEC the Government of the Netherlands has developed and introduced a procedure for the application of environmental impact assessment. The environmental impact assessment procedure has been laid down in Dutch law as follows:

- Extension of the Environmental Protection (General Provisions) Act (Wabm) to include regulations with respect to environmental impact assessment (April 1986). The text of the Act includes a section on the basis of which, three years after the introduction of the national environmental impact assessment procedure, the provincial authorities may themselves impose mandatory environmental impact assessment (EIA), or grant exemption from it (as from May 1990).

- Environmental Impact Assessment Decree (May 1987): this decree lists the

---

[5] The ECW report on environmental impact assessment was effected under the chairmanship of Professor Dr. A.B. Ringeling.

activities and decisions relating to the activities subject to environmental impact assessment.

- Notification of Intent Environmental Impact Assessment Decree (July 1987); this decree designates the contents/requirements of the notification of intent.

**(b) Deficiencies in formal compliance**

The European Commission informed the Netherlands Government by letter dated April 25, 1990, that the Dutch regulations concerning environmental impact assessment do not fully correspond to the EC environmental impact assessment Directive 85/337/EEC.

Deficiencies are:

- failure to apply some projects from Annex I of Directive 85/337/EEC to EIA unconditionally;
- the exemption regulations (section 41e, Wabm) provide the possibility of exemption of certain projects from EIA based on the criterion of 'no serious harmful consequences for the environment' which does not tally with the criterion in the EC Directive of 'in exceptional cases';
- the Dutch regulations concerning environmental impact assessment do not include the possibility of making EIA for some projects from Annex II of the Directive obligatory;
- the Dutch Environmental Impact Assessment Regulations contain no requirement to consult neighbouring countries concerning activities with transfrontier environmental impacts.

**(c) Reasons for delay in full compliance**

It appears that the Netherlands Government assumed that the Dutch Environmental Impact Assessment Regulations satisfied the EC Environmental Impact Assessment Directive. Another reason is that the Dutch EIA system was already in preparation before the Directive was published.

(d) Remedy of any remaining deficiencies

As stated in (b) above the EC has declared the Netherlands Government to be in default regarding the introduction of environmental impact assessment. This notice of default will lead to changes to Dutch law. The present position with regard to these changes is laid down in the 'Report of the Government on the Working of the EIA Regulations' of May 1991. This Government viewpoint was submitted to the Lower House of Parliament and to various advisory bodies. The Lower House is expected to debate the Government's viewpoint shortly.

The Government policy statement briefly reports on the way environmental impact assessment has operated in the past few years. Proposals are made for the amendment of the Environmental Impact Assessment Regulations, which should result in full implementation of Directive 85/335/EEC.

The Government has sent a bill to the State Council which proposes the following three changes to the Act:

- The basis for exemption on the criterion of 'no serious harmful environmental consequences' will be deleted (section 41e, first sub-section, a);
- Regulations will be included in the Wabm for a screening procedure to consider the necessity of the preparation of an environmental impact statement for individual activities listed in Annex II of the EC Directive on Environmental Impact Assessment, if special circumstances are concerned;
- Finally, regulations will be included in the Act for mandatory provision of information and consultation where transfrontier environmental effects are concerned, in compliance with Article 7 of the EC Directive on Environmental Impact Assessment.

Furthermore, the State Council is asked for its advice on proposals for full implementation of Annex I of Directive 85/337/EEC in the Environmental Impact Assessment Decree. Finally, a change in the Environmental Impact Assessment Decree is in preparation, on the basis of which the remaining Annex II projects listed in the Directive will be subject to

a screening procedure (see EIA Regulatory Developements July 1991-March 1992, at the end of the Netherlands annex).

(e) Competent authorities

In the Netherlands the obligation to undertake EIA for an activity is linked to one of the decisions to be made by the authorities regarding that activity. These decisions, described as 'crucial decisions', are listed in Annex C of the Environmental Impact Assessment Decree. They concern the granting of an (environmental) licence, the adoption of a (policy) plan, the choice of a site, determination of a road or railway route and so on.

If environmental impact assessment is to be applied the competent authority (which is designated in the various laws, on the basis of which the decision in a specific case has to be made), performs the various environmental impact assessment tasks.

The Minister of Housing, Physical Planning and the Environment is responsible for the provision of information to, and consultation of, the other Member States.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

(a) Outline of criteria/thresholds

Annex C of the Environmental Impact Assessment Decree contains a list of activities for which EIA is mandatory. This Annex contains the projects from Annex I of the Directive and some of the projects from Annex II. The Annex has three columns: in the first column the activities are designated for which EIA is mandatory; in the second column threshold values are listed (if the size of the activity exceeds the threshold value, environmental impact assessment must be applied); in the third column the decisions are specified which involve mandatory environmental impact assessment.

The threshold values used may be distinguished in accordance with:

- longitudinal measurement/distance;
- weight;

- vulnerability of the area;
- surface area;
- capacity/quantity.

Implementation of environmental impact assessment is mandatory if the extent of the proposed activity exceeds the threshold value.

**(b) Comment on criteria/thresholds**

In order to evaluate the Dutch Environmental Impact Assessment Regulations for the period 1987-1990 the Evaluation Committee on Wabm (ECW) has had research carried out on, amongst other topics, experience with the Environmental Impact Assessment Decree. For the purpose of the research all parties concerned with EIA were interviewed. The results of this research have been published in Background Study No. 11. The conclusions of this study were:

- The list of activities subject to EIA is, in the opinion of the persons interviewed, incomplete. Not only are some activities absent from the list, but also threshold values for various activities are set too high. The magnitude of many threshold values is felt to be arbitrary;
- A number of initial problems were experienced in the application of the Environmental Impact Assessment Decree. Several of these problems concern the lack of clarity of certain descriptions;
- Many of the difficulties have been remedied in the meantime, sometimes thanks to the provision of extra information, sometimes thanks to supplementary policy and sometimes by judicial opinion.

It is believed that Germany and Belgium have adopted some of the thresholds mentioned in the Dutch Environmental Impact Assessment Decree.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

**(a) Number and categories of EIAs**

Environmental impact assessment procedures had been applied to about 286 activities by December 1991. None of the provinces have insisted on extra EIA obligations to date. Under the new provisions now being considered relating to Annex II the increase in the annual number of EISs will probably be 20-40.

**(b) Information specified in Article 5 and Annex III**

Section 41j of Wabm specifies the contents requirements of an environmental impact statement. These are as follows:

- a description of the objectives of the proposed activity;
- a description of the proposed activity and of alternatives, including the alternative utilizing the most environmentally sound possibilities available;
- an description of the decision for which the EIA is performed and a survey of other relevant decisions already made or still to be made (e.g. land use plan provisions);
- a description of the existing environmental conditions;
- a description of the expected environmental conditions in the absence of the activity;
- a description of the consequences of the activity and of each of the alternatives (including a description of the methods used);
- a comparison between the effects of the activity and each of the alternatives;
- a survey of gaps in knowledge;
- a summary understandable by the general public.

The competent authority draws up guidelines for each separate project (Section 41o, Wabm). These project-specific guidelines detail the information about effects and alternatives which are to be contained in the EIS. The guidelines are public.

The competent authority holds a public hearing and asks statutory consultees to make recommendations regarding guidelines (Section 41z, Wabm). The Commission for Environmental Impact Assessment (EIA Commission) also gives advice on these guidelines. This

advice has proved very valuable in practice: in most cases it has been followed wholly or for the greater part by the competent authority.

To ascertain whether the EIS meets the legal requirements and conforms to the guidelines the statement is checked. Checking is carried out both by the competent authority (Section 41r, Wabm) and by the EIA Commission (Section 41z, Wabm). In the latter case the checking is done by independent experts. The Commission's report gives a thorough view of the quality of the environmental impact statement by giving its opinion on the scientific quality and completeness of the EIS.

(c) **Making authorities' information available to the developer**

Wabm (Section 57a) specifies that data relevant to the drawing up of, or the assessment of, the environmental impact statement is to be provided by the competent authority. Authorities and the Central Institute on Environmental Information (Cimi) generally prove to be very cooperative in providing these data.

(d) **Arrangements for publication of EIS**

Sections 41t, 41u and 41r, Wabm concern regulations for the publication of the environmental impact statement. Publication has presented no problems in the Netherlands, though the purchase price of EISs is sometimes high.

(e) **Arrangements for consultation and public participation**

The Dutch Environmental Impact Assessment Regulations lay down two occasions on which the statutory consultees designated in Section 41a (Wabm) have to be consulted and public participation has to be organised. The first is public participation in regard to establishment of the guidelines (Section 41n, Wabm). The second occasion is when the environmental impact statement is evaluated (Section 41w, Wabm). This second occasion is linked to consultation on the decision that has to be taken in relation to the permit or plan in question. In addition to this the competent authority is obliged to organise a public meeting where anyone may comment on the environmental impact statement (Section 41x, Wabm).

The following remarks may be made about the way in which public participation works in practice.

Participation in regard to the guidelines

The statutory consultees generally consider possible alternatives and specific circumstances. The contributions of the consultees vary with respect to contents. Usually their contribution is focused on the specific characteristics of the location planned for the activity. Sometimes the advisors make recommendations on the environmental aspects that have to be taken into consideration.

The quality of the public participation in formulating the guidelines varies greatly. Often the responses are directed towards the question as to whether the activity is to take place or be cancelled. However, this is a question which is not the subject of discussion at this stage of the procedure. This is the stage when participation is aimed at determining the points to be given special attention in the EIA process.

In advice about the guidelines from the EIA Commission, independent experts appointed by the Commission elaborate the environmental effects to be described, the objectives, decisions previously taken, environmental aspects that should be addressed, specific local situations that have to be mapped, methods that may be used and alternatives that have to be given attention. The Commission's advice provides the competent authority with a virtually complete outline of the guidelines required. The advice on the guidelines is generally found to give a good basis for the guidelines themselves and saves the competent authority much work. Indeed, the advice on guidelines from the Commission is often simply agreed by the competent authority.

Public participation in regard to the environmental impact statement

At this stage, public participation yields specific and often very valid comments. In its report the ECW states its impression that the public nature of the guidelines, the advice on the guidelines from the EIA Commission and the advice from the statutory consultees enhance the quality of public participation.

Often the review by the Commission gives rise to a supplement to the environmental impact statement. Sometimes such a supplement involves the elaboration of an alternative that emerged from the participation procedure. Mostly, however, gaps in the EIS are filled in these supplements.

The ECW draws the conclusion that the Commission's review identifies fully any deficiencies and inaccuracies in the EIS. The Commission's review of the environmental impact statement is essential. In no way do such reviews give the impression that the independence of the Commission is at issue. They make an important contribution to the availability of good environmental information.

Public participation comments

The comments from the public on the guidelines and the environmental impact statements are especially directed at the following subjects[6]:

- alternatives and/or mitigating measures for the execution of the proposal;
- information about vulnerable groups of people and/or objects in the surroundings of the proposed activity;
- damage or hinderance to the personal interests of persons or groups of persons (health, property, perception);
- the policy which covers the proposed activity or endeavours to execute it;
- the weight of the remaining uncertainties.

**(f) Transborder impacts**

The Dutch Regulations on environmental impact assessment do not contain a formal obligation to implement Article 7 of the Directive. Nevertheless, in practice, this has been carried out by sending the notifications of intent, guidelines and EISs to neighbouring countries in approximately 10 cases to date.

---

[6] These data are taken from the annual report for the year 1990 of the Commission for Environmental Impact Assessment.

(g) **Role of EIS and consultation findings in project authorization**

With respect to the use of information from the environmental impact statement in decision-making Dutch legislation contains several provisions. The Dutch Regulations on environmental impact assessment lay down that, the competent authority shall state in a reasoned way how the information from the environmental impact statement influenced the decision and what consideration was given to the alternatives (Section 41ak, Wabm). The ECW concludes in this respect that the application of environmental impact assessment makes the decision process more open to public scrutiny.

The decision by the competent authority is public. The competent authority must send a copy of the decision to the participants in the public hearings, the statutory consultees and to the EIA Commission. Moreover, the decision is made public through the media (Section 41ab, Wabm).

Furthermore the competent authority may not take a decision when the information in the environmental impact statement is out of date. Neither may the competent authority make a decision when the circumstances upon which the statement was based have changed considerably (Section 41aa, Wabm). In addition to this, Wabm contains an article that provides for a linkage between the environmental impact statement and the decision the competent authority has to arrive at concerning the activity (Section 41ab, Wabm). This forces the authority to take the EIS into account in the decision.

(h) **Modification of projects**

The ECW concludes that, through environmental impact assessment at the time of the decision process, more and better environmental information is available than is the case with projects to which environmental impact assessment is not applied.

As well as the contribution relating to the content of environmental impact statements, the application of environmental impact assessment contributes to taking the environment fully into consideration in the decision process. The ECW concludes that, in this way, environmental aspects are much more involved in the discussion about the development and in the design of the

activity than is the case without application of environmental impact assessment.

The ECW judges environmental impact assessment to be a reasonably efficient tool. The ECW's point of view is based on the results of the evaluation study, in which it draws the following main conclusions:

- The environmental impact statement (with possible additions) is found to contribute an ample quantity of environmental information to the decision process. In one case this has even led to the setting of a new environmental standard;

- The EIA procedure confronts the initiator, and the competent authority, with the environmental consequences of an activity at an earlier stage and more intensively. This clearly stimulates thinking about, and the search for, solutions to negative environmental effects and about better alternatives;

- In many cases environmental impact assessment is shown to streamline existing procedures. Both initiators and competent authorities consider this a considerable asset;

- The obligation to give a reasoned decision forces the competent authorities to indicate in what way they take the environment into account. An important advantage is that the decision process, and notably the underlying weighting and choice of elements, becomes more open to public scrutiny;

- In the past few years something of an 'EIA-world' has emerged. Initiators, competent authorities, the EIA Commission, the Ministries of Housing, Physical Planning and the Environment and of Agriculture, Nature Management and Fisheries, consultants and so on have built up their specific know-how and experience of environmental impact assessment. This group (perhaps 300 people in total) is still growing as a result of courses and seminars organised in recent years. Know-how and skill in the application of environmental impact assessment

are still increasing. The ECW attaches great importance to this because of the problems in relation both to procedure and to content arising where developers undertake an environmental impact assessment for the first time. Where a developer has already used EIA, the procedure appears to run more smoothly on subsequent occasions and the competent authority as well as the initiators view the application of environmental impact assessment in a more positive way because of the benefits to be gained.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO DUTCH LEGISLATION AND PRACTICE

### (a) Measures to monitor implementation of Directive

The Dutch Government is obliged by law to evaluate the functioning of the environmental impact assessment tool every five years (the first time after three years). A major means to this end, was the setting up of the Evaluation Commission on Wabm (ECW). This Commission completed the first evaluation of environmental impact assessment in September 1990. The findings of the ECW are laid down in a report 'Naar een volwaardige plaats' (Towards a Better Procedure to Protect the Environment). The report, which is mainly based on three background studies, was presented to the Minister of Housing, Physical Planning and the Environment and the Minister of Agriculture, Nature Management and Fisheries on September 7, 1990. At the request of the Government a study of the implementation of Directive 85/337/EEC was a part of this evaluation. By May 1991 the Government has sent a report, based on this evaluation, to the Parliament.

In addition, the EIA Commission produces an annual report on its EIA activities.

### (b) Provision for scoping

The competent authority draws up guidelines indicating the information that is to be included in the environmental impact statement. Special attention is given to the alternatives that are to be elaborated.

The competent authority organizes public participation in regard to these guidelines and

invites advice from the EIA Commission and the officially appointed advisors, based on the notification of intent of the proponent of the activity.

(c) Quality of EISs

Supplementary information is often produced as a result of the evaluation of EISs by the EIA Commission. If the environmental impact statement is not complete, the supplement ensures that sufficient information of good quality is available for the decision. Examples of common failings are alternatives which were not given full attention and insufficient attention being given to some environmental aspects.

(d) Provision for formal review of adequacy and quality of EISs

The quality of the information in the environmental impact statement is controlled in the following way:

- Assessment of the statement by the competent authority;
- Opportunity for the public to comment on contents and quality of the report;
- Review of the environmental impact statement by the EIA Commission (this is the formal review council). The recommendations from the EIA Commission provide comment at length on any deficiencies of the environmental impact statement and on any inaccuracies found in it. These recommendations state whether or not the information in the EIS is complete and correct, according to scientific standards, the guidelines and the legal contents requirements.

(e) Provision for monitoring and post-auditing

The Dutch Environmental Impact Assessment Regulations include the obligation to perform an evaluation of which effects actually occur when the project is implemented, and to compare these with the effects predicted in the environmental impact statement. If considerable deviations are found, the competent authority takes supplementary measures, using any available means (such as, for instance, tightening licence conditions). A handbook that can be used to assist in undertaking evaluation programmes exists.

To date, only a few evaluation programmes have been started in the Netherlands. This is because of the fact that the most projects take a considerable time to be implemented.

(f) Assistance to practitioners

Several training activities in environmental impact assessment have been undertaken in the last few years by the authorities, by other parties concerned with environmental impact assessment (such as firms of consultants) and by training institutes.

In addition to the development and organization of courses, a body of literature has been published. Pride of place is taken by the 'Handleiding Milieu-effectrapportage' (Manual on Environmental Impact Assessment), developed by the Ministry of Housing, Physical Planning and the Environment. In addition, this Ministry also published a series on the application of methods of impact forecasting. There are 8 volumes in which, besides a general introduction, prediction methods are described for air, surface water, soil, plants/animals/ecosystems, sound, radiation and health. (See also above and list of references.)

(g) Effect on timescale, costs, etc.

On the basis of the evaluation study, the ECW argues that:

- the application of environmental impact assessment indeed increases the formal time needed for the procedure for project appraisal but that the time used in total generally remains the same and in some cases even decreases. The latter is due to the absence of appeal;
- supplementing the environmental impact statement causes delays. Sometimes a supplement is necessary because the initiator omitted to provide all the information requested in the environmental impact statement;
- delays occur because of inaccurate preparation for the EIA procedure and because insufficient attention is paid to the organisation of the project.

To recapitulate, the ECW states, as its impression, that environmental impact assessment does not cause delays. Another impression is that environmental impact assessment results in fewer

appeal procedures. This may compensate for any loss of time in the preceding part of the procedure.

The regulation for coordination in regard to environmental impact assessment included in the Act contributes to the successful operation of the procedure. The informal consultations between the parties concerned (initiator, competent authority, EIA Commission and other interested parties) also contribute to streamlined decision-making.

The costs of drawing up an environmental impact statement or having it drawn up vary greatly. This is chiefly because of the varying complexity of projects. A broad indication is that for a 'simple' environmental impact statement, the cost could easily amount to between NLG 50,000 and NLG 100,000 and for a complex activity the cost of the environmental impact statement could rise from to NLG 500,000 - NLG 1,000,000 or more. Generally, the costs are limited to 0.001 - 0.01% of the cost of large projects, but perhaps 1% of the cost of smaller projects. The Ministries pay local authorities NLG 50,000 for each EIA, to cover their administrative costs. Partly though, the costs concerned would have been incurred even without the application of environmental impact assessment (for example, costs involved in the application for a licence).

Finally the ECW observes that the return on this investment could be higher if the results of the environmental impact statement were used to a greater degree for the initiator's own planning and project development.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

### (a) Provisions already made

The Dutch Regulations for Environmental Impact Assessment correspond for the greater part to EC Directive 85/337. In so far as there are deficiencies the European Commission pointed these out in its letter of April 25, 1990. The modifications of the Environmental Impact Assessment Regulations which are being prepared will remove these deficiencies.

The practice of environmental impact assessment appears to be developing satisfactorily. There have been some problems with the introduction of environmental impact assessment, although these problems were limited as a result of a long period of preparation. There was some lack of clarity about whether certain activities were subject to EIA or not. These problems, however, have generally been solved.

### (b) Ambiguities in the Directive

Annex II of the Directive caused some difficulties in implementation. As a result of the remarks of the European Commission there is more clarity on this now. There were also some difficulties in interpreting some descriptions in Annex I.

### (c) Recommendations for more satisfactory, cost-effective compliance in the Netherlands

The following observations can be made in regard to the application of environmental impact assessment in the Netherlands:

- The benefits of the application of EIA are larger where the results are used to a greater degree in the initiator's own planning and project development;

- to be able to draw up the environmental impact statement, the initiator needs to have the outline of the proposed activity worked out to a certain extent.

However, the proposal should not be developed to such an extent that the information from the environmental impact statement cannot or can hardly be incorporated into the design of the project. It is advisable, therefore, for the initiator to consult an expert in this field: this could be the EIA Commission, the Environmental Impact Assessment Section of the Ministry of Housing, Physical Planning and the Environment, or firms of consultants with ample experience in the field of environmental impact assessment.

## REFERENCES

Wet algemene bepalingen milieuhygiene, regelen met betrekking tot milieu-effectrapportage, Staatsblad 1986, 318.

Besluit van 20 mei 1987 houdende de uitvoering van de Wet algemene bepalingen milieuhygiene, Staatsblad 1987, 278.

Besluit startnotitie milieu-effectrapportage, Nederlandse Staatscourant, 13 december 1987, nr. 154.

"Naar een volwaardige plaats" Advies over de werking van de regeling milieu-effectrapportage uit de Wet algemene bepalingen milieuhygiene, Evaluatiecommisie Wabm, advies nummer 3, augustus 1990.

"Evaluatie regeling milieu-effectrapportage", Evaluatie-commissie Wabm, achtergrondstudie nummer 10; Berenschot, OD 205, 1990.

"Inventarisatie van ervaringen met het Besluit milieu-effectrapportage", Evaluatiecommissie Wabm, achtergrondstudie nummer 11; drs. J.J.F.M. van Haeren, DHV Raadgevend Ingenieursbureau, 1990.

"De discrepanties tussen de EG-richtlijn inzake milieu-effectrapportage en de Nederlandse regelgeving". Hoe kan ten volle aan de EG-richtlijn worden voldaan? Evaluatiecommissie Wabm, achtergrondstudie nummer 12, mw. drs. C.M.S. Glim, Bureau voor Contractresearch BV, 1990.

Handleiding milieu-effectrapportage, Ministerie van VROM en Ministerie van LNV, 1987.

"Brochure voor het opstellen van het evaluatieprogramma bij milieu-effectrapportage voor afvalstoffenplannen, m.e.r. - reeks, Ministerie van VROM en LNV, 1990.

Commission for Environmental Impact Assessment (annual) Annual Report EIA Commission, Utrecht (in Dutch).

## APPENDIX

**Persons interviewed** (as part of ECW background study n° 11)

Permitting authorities

- de heer Uzerman, gemeente Lochem
- de heer E. Groenewoud
- mevrouw I. Dibbits, provincie Gelderland
- de heer L. Hartholt, provincie Zuid-Holland
- de heer R. Groen, provincie Zuid-Holland
- de heer B. Hoogendorp, provincie Noord-Holland
- de heer H. Dekkers, provincie Limburg
- de heer J. Vegt, provincie Limburg
- mevrouw K. Pon, Ministerie van Verkeer en Waterstaat, Hoofddirectie van de Waterstaat
- mevrouw M.C. de Soet, Ministerie van Verkeer en Waterstaat, Hoofddirectie van de Waterstaat
- de heer J.J. Sybrandi, Ministerie van Defensie
- de heer A.H.L. Dijkzeul, Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer, directie afvalstoffen
- de heer W. Maris, Intergewestelijk Overleg Zuidoost-Brabant

Developers

- de heer L. van der Hoeven, NV Nederlandse Spoorwegen
- de heer H. Codeé, Centrale Organisatie Voor Radio-actief Afval
- de heer D. van de Wouden, provincie Drenthe
- de heer R.T.A. Hillen, Ministerie van Economische Zaken
- de heer P.J.M. van de Ham, Ministerie van Economische Zaken
- de heer J.P.J. Nijssen, gemeente Rotterdam
- de heer R.G.J. Orden, gemeente Rotterdam
- de heer M.C.M. Gorrissen, Stadsgewest Breda
- de heer F. de Lange, Haskoning

Ministries

- de heer J.J. de Boer, Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer
- mevrouw M. de Jong, Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer
- de heer T. Verboom, Ministerie van Landbouw, Natuurbeheer en Visserij

Advisers

. de heer J.J. Scholten, Commissie voor de milieu-effectrapportage (secretaris)
. de heer C. Lambers, Commissie voor de milieu-effectrapportage (lid)
. de heer M.M. Mensink, regionale directie Natuur, Milieu en Fauna Noord-Brabant
. de heer H. Wardenaar, regionale inspectie milieuhygicne, Zuid-Holland
. de heer M. Oversluizen, regionale inspectie milieuhygiene, Zuid-Holland

NGOs

. de heer H.A.M. Rijssenbeck, Vereniging Nederlandse Ondernemingen
. mevrouw T. Kroese, Stichting Natuur en Milieu
. de heer V. Jurjens, Stichting Natuur en Milieu

## EIA REGULATORY DEVELOPMENTS JULY 1991 - MARCH 1992

- Amended Environmental Impact Assessment Decree (17 March 1992) - remaining Annex II projects listed in the Directive will be subject to a screening procedure.

# ANNEX FOR PORTUGAL

## INTRODUCTION

The annex for Portugal has been prepared to include and reflect the main facts and opinions collected through personal interviews conducted with several persons and organisations from different sectors involved in the EIA process - developer organisations, key competent authorities, authorities with relevant environmental responsibilities and environmental defence groups. These are listed in the appendix to this annex. The author would like to express his gratitude to these persons and organisations for their many useful contributions to this annex, but to emphasise that its contents are the responsibility of the author.

## 1. EXTENT OF FORMAL COMPLIANCE BY PORTUGAL WITH THE REQUIREMENTS OF THE DIRECTIVE

The entry of Portugal to the EEC was achieved only in January 1986, one year after the publication of the Directive. However, even during 1987 and 1988 some EIA studies were done in Portugal taking the Directive into account.

Meanwhile, the Portuguese Environmental Act "Lei de Bases do Ambiente" was passed through Law No. 11/87, which made specific provision for environmental impact assessment in Articles 30 and 31, but did not go into details. Additionally, a specific provision was made for EIA studies of forest projects through another legal instrument.

Nevertheless, and in spite of the fact that other EIA studies were done meanwhile, Portugal delayed about two years beyond the date where full implementation of the Directive became mandatory (July, 1988). This was apparently due to lengthy discussions (relating to the range of projects to be covered, arrangements for consultation) between several official departments and other organisations over the contents of successive versions of what eventually (in 1990) became the Portuguese legislation on EIA.

The implementation of Directive 85/337/EEC in Portugal has been undertaken in Decree Law (D.L.) No. 186/90 and Regulatory Decree (D.R.) No. 38/90, both published during 1990.

These laws formally implement most of the articles of the Directive with the exception of the following, which require further consideration:

- Article 7 of Directive 85/337 (transborder impacts) is not mentioned either in D.L. No. 186/90 or D.R. No. 38/90;

- There is no mention of the requirement to include mitigation measures in the EIA, in Annex II (content of EIA study) of D.L. No. 186/90, although they are specified clearly in Article 2 of D.R. No. 38/90;

- Although Article 2, Item 2 (D.L. No. 186/90) mentions, *inter alia*, that the EIA should assess the effects on man, in Item 3 of Annex II of D.L. No. 186/90 (content of EIA study) this aspect is missing;

- Again in D.R. No. 38/90 Article 2, Item 1, no mention is made of impacts on the landscape (although this is mentioned in Article 2, Item 2 of D.L. No. 186/90).;

- Three aspects seem to be particularly unclear and are creating controversy:

  - Article 11, Item 2 of D.L. No. 186/90 exempts from the EIA process "the projects already in process of approval at the date of publication of D.L. No. 186/90".

  - A ministerial order (signed by the Minister of Environment and Public Works) exempts from the EIA process all road and highway projects whose preliminary study ("Estudo Prévio") was already done at the date when the Directive became mandatory (July, 1988). This ministerial order may be revised.

  - Article 4, Item 2 of D.L. No. 186/90 mentions that the studies done and their results shall be made public, but Article 4, Item 3 of D.R. No. 38/90 only specifies that a non-technical summary shall be available to the public and that,

when considered necessary, public hearings will be undertaken.

Whilst, on the one hand, the above mentioned points are not completely clear or may represent deviations from the requirements of Directive 85/337, on the other hand, D.L. No. 186/90 and D.R. No. 38/90 contain interesting positive provisions:

- These clearly require (for Annex I projects) a study content very close to the full requirements of Annex III of the Directive;

- D.R. No. 38/90 (for Annex I projects) requires a risk analysis of potentially serious accidents and emergency plans, which is not required by the Directive itself;

- D.R. No. 38/90 requires the EIA (for Annex I projects) to include the analysis of socio-economic impacts.[7] Again, this is an aspect not explicitly required by the Directive;

D.R. No. 38/90 specifies in its Annex a list of 24 types of projects (listed in Annex II of the Directive) which require mandatory EIA. This represents a clear step forward towards environmental protection in Portugal, although these projects do not cover all sub-categories of Annex II (see Section 2 below for further details).

It may therefore be stated that there still exists a limited number of points of potential non-compliance but there is also a certain number of others where the Portuguese legislation is formally ahead of the present mandatory requirements of Directive 85/337. Whether the level of practical compliance with the Directive corresponds to that of formal compliance is analysed below (Section 3).

According to the above mentioned laws, the developer is responsible for presenting to the licensing authority (competent authority) the EIA study for his project and this authority sends it to the Government Minister responsible for the environment. This Minister must designate the

---

[7] Territorial planning; population growth; industrial development; employment; tourism; number of residents; urban pressures; value of land; accessibility.

entity within the public administration responsible for carrying through the next stages of the EIA process, namely producing its own comments on the project and the EIA study, promoting public consultation and participation, and producing a report synthesising the findings from consultation (Article 4, Item 6 of D.R. No. 38/90 and Article 4, Items 1 and 2 of D.L. No. 186/90).

More recently, the already mandatory need for an EIA process for certain projects specified in D.L. No. 186/90 and D.R. No. 38/90 has been inserted more clearly, through D.L. No. 109/91 and D.R. No. 10/91 (of March 1991), in the licensing procedures for industrial activities (Regulamento do Exercicio da Actividade Industrial).

There are no known firm proposals at present to introduce new regulations relating to Directive 85/337.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

The Annex of D.R. No. 38/90 establishes a list of twenty-four types of projects (and in many cases the thresholds for them) to be subjected to EIA. This Annex also specifies the contents of the EIA study (Article 2, Item 2). The types of projects are:

(a) Nine types of agricultural projects:

- projects for the restructuring of rural land holdings in irrigated areas, covering areas larger than 350 ha;
- projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes, of areas larger than 100 ha;
- projects for afforestation with fast growing species, or extension of afforestation in existing wooded areas, of areas larger than 350 ha;
- water-management projects for agriculture, associated with the regulation of permanent water courses, for the benefit of areas larger than 2500 ha;
- pig-rearing installations with a capacity of 4000 animals or more;
- cattle-rearing installations with a capacity of 500 animals or more;
- poultry-rearing installations, as follows:

- chickens: installations with a capacity of over 75,000;
- cockerels: installations with a capacity of over 150,000;
- ducks: installations with a capacity of over 75,000;
- turkeys: installations with a capacity of over 75,000;

- agricultural-industrial installations with a capacity of 10,000 tonnes of raw materials per year or more;
- slaughtering and meat product installations which process more than 30,000 tonnes per year;

(b) Three types of extractive industry projects:

- non-metalliferous and non-energy-producing mineral extraction, with areas larger than 5 ha and/or annual production larger than 150,000 tonnes;
- energy-producing mineral extraction, with areas larger than 5 ha and/or annual production larger than 150,000 tonnes;
- metalliferous mineral extraction, with areas larger than 5 ha and/or annual production larger than 150,000 tonnes;

(c) Five types of industrial facilities:

- installations for the manufacture of cement;
- installations for the production or enrichment of nuclear fuels;
- installations for the collection and processing of radioactive waste;
- storage of inflammable gases with a capacity of more than 300 tonnes and of liquid gases with a capacity of more than 100,000 tonnes. For EIA purposes, two or more installations are considered as just one if they are less than 500 metres distant, whether or not they are in the same ownership;
- manufacture of pulp, paper, and board.

(d) Seven types of infrastructure projects:

- dams higher than 15 metres from the base to the lip, or with a storage volume larger than 100,000 $m^3$, or a reservoir with an area larger than 5 ha, or a dam wall of length greater than 500 metres, or dams whose importance and dimensions

could involve special construction conditions or could represent a risk to the down-river population;

- electricity transmission lines with a capacity larger than 200 kV;
- urban development projects with an area larger than 10 ha;
- pipelines;
- marine plants, yacht marinas, and docks:
  - located in river estuaries:
    - ◇ when located in protected areas;
    - ◇ when not located in protected areas, more than 100 places to boats up to 12 metres long, but 7% of the places can be for bigger boats;
  - located in rivers (except estuaries), lakes or reservoirs, more than 25 places for boats up to 6 metres long, but 7% of the places can be for bigger boats;
  - located on the sea coast, more than 250 places, boats up to 12 metres long, but 7% of the places can be for bigger boats;

- tourist villages not included in regional, local or urban plans, with an area larger than 50 ha, or more than 70 residents per hectare, or a construction index larger than 0.6 $m^3/m^2$;
- any kind of tourist installation (hotels, etc.) not included in regional, local or urban plans, or those designed to accommodate more than 1,000 persons.

It is not completely clear why these types of projects were selected to be subject to EIA and why some other types (e.g. relating to industrial activities), known already for their contribution to environmental degradation in the country, were not included.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

Because the Portuguese laws implementing Directive 85/337/EEC were published in 1990, only a relatively small number of projects have passed through the EIA process so far.

Different organisations within the public administration were involved with different projects so it is difficult to assess accurately the exact number of EIA studies prepared between 1988 and 1990 but, based on the opinion of those consulted (see the appendix to this annex), a rough estimate points to around two dozen, relating predominantly to highway schemes. Less than twelve of these were the subject of public consultation.

There is a clear indication that authorities with relevant information in their possession have been making this available to the developers. However, the coverage of the information required of the developer, prior to D.R. 38/90, by Article 5 and Annex III of the Directive varied considerably. It is too early to assess whether this has changed since D.R. 38/90 was approved.

Of the above mentioned EIA studies, very few have been made available to the public. D.L. 186/90 specifies that the EIA study and results should be made available to the public but D.R. 38/90 only specifies that the non-technical summary should be provided. Instances are known where only the latter has been provided.

Since D.R. No. 38/90 was published only in November 1990, it is too early to judge the extent of practical compliance with the Directive. However, the number of EIA studies presented to the several authorities interviewed (see appendix) has been surprisingly low taking into consideration the types of projects which D.L. No. 186/90 and D.R. No. 38/90 specify should be subject to the EIA process.

It appears that the organisations designated by the Ministry of Environment under D.R. 38/90 to participate in the EIA process received less than five up to the end of May 1991. This raises the question - which can only be answered satisfactorily when fuller information is available - as to how well Portuguese EIA regulations are being implemented in practice. In particular, it is not yet clear whether all of the required projects are being subjected to EIA or whether they are all being processed in the manner specified in the Portuguese regulations.

The limited information available relating to arrangements for public consultation and

participation suggests that practice has been variable. Some concerns have been expressed over the timing (i.e. lateness) and effectiveness of the consultation arrangements.

As previously mentioned, there is no regulatory provision covering the assessment of trans-boundary impacts and therefore there is no practical compliance to report.

There is very limited experience about the provision of information to the public about the decision and the reasons for it but there appear to be doubts about how effectively the provisions of Articles 8 and 9 of the Directive have been implemented.

On the more positive side, perhaps a dozen projects (processed between 1988 and 1991) have been modified and been subject to extensive mitigation measures suggested by the EIA studies and by agreement between the Ministry of Environment and the other parties involved. Without the existence of Directive 85/337/EEC, these highly useful mitigation measures may not have been introduced into a number of large infrastructure projects (notably highway schemes).

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO PORTUGUESE LEGISLATION AND PRACTICE

No formal measures appear to have been undertaken to monitor the implementation of Directive 85/337 within Portugal. From the several interviews conducted (see appendix) some points were repeatedly raised and these are described below.

- Only in a very few cases, perhaps less than twelve between 1988 and the time of writing, have any scoping activities been undertaken in the course of undertaking EIA studies. These have all been undertaken on a non-mandatory basis. There is no mandatory provision for scoping at present.

- The quality of the majority of EIA studies is considered unsatisfactory by the environmental authorities and environmental defence organisations. However, there are some exceptions. Review of the EIA studies by commissions attached to government departments has been undertaken for a very limited number of studies, between 1988 and

1990, although there was no formal requirement for this.

- The review criteria used by different official departments to evaluate the quality of EIA studies have not been uniform and consistent. In some cases this has caused delays, misunderstandings and doubts for some developers.

- It is questionable whether the public administration services in existence at present have enough human resources in their EIA sections to review satisfactorily the EIA studies and to conduct the stages of the EIA process for which they are responsible. This is especially doubtful given the increased number of projects belonging to the categories specified either in D.L. No. 186/90 (Annex I of the Directive) or in D.R. No. 38/90 (24 types of projects) which is expected to be subject to EIA when these requirements become fully operational.

- Where projects are co-financed from the Community's Structural Funds the need to respect deadlines, in making the expenditures, creates pressure to accelerate the completion of procedures and may inhibit satisfactory EIA implementation.

- There has not yet been a systematic effort to establish training course programmes for consultants, entrepreneurs or officials of governmental departments. The number of specific courses on environmental impact assessment provided since 1988 has been around 10. These courses have mostly been provided by the Regional Co-ordinating Commission for the North, the New University of Lisbon and the Technical University of Lisbon.

- No specific systematic action has been taken to inform developers about the need, timing, contents, usefulness and importance of the EIA process. One set of EIA guidelines has been produced but, on the whole, this is not considered useful by developers, among others.

- Besides these negative aspects (perhaps reflecting in part the complexity of implementation of the environmental impact assessment process for projects) a highly

positive aspect should also be noted: in a small number of cases, mainly relating to highways and resulting from co-operation between developers and official departments, the implementation of mitigation measures proposed in EIA studies is being carefully monitored and enforced during project implementation.

- Generally speaking there is, to date, no evidence that any significant delays are being introduced as a result of the EIA process, particularly if the EIA study is started early enough and is properly managed.

- In a small number of cases mitigation measures for environmentally sensitive projects are leading to some increase in project costs. This is of the order of 5% (though in some respects these mitigation measures have become an integral part of project design). In the other cases there is no perceptible change in costs.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

### (a) Effectiveness of implementation in Portugal

The legal provisions already made by Portugal seem - with the exception of the omissions and unclear points already mentioned - to meet the essential basic requirements of EEC Directive 85/337.

Nevertheless, the delay in publishing the Portuguese laws, and the indications about the nature of practical application before and since then, raise serious questions about the effectiveness of the implementation of the Directive in the country to date.

The main problems and areas identified as needing to be solved or significantly improved in future Portuguese practice involve:

- the extension of training activities;
- greater provision of information to the several public administration organisations, the public and developers about the Directive's objectives and how to meet them. Particular

regard to the requirements of small and medium sized enterprises and of local and regional administrations is needed;

- the need to define uniform criteria for reviewing EIA studies;
- the need to reinforce the capabilities of environmental authorities by providing them with sufficient human resources to implement the EIA process;
- the need to improve the public availability of the EIA studies on a systematic basis;
- the need to provide adequate information to the public and for more extensive consultation;
- the need to clarify the interpretation of Articles 5(1) and 5(2) of the Directive, particularly relating to minimum information requirements.

## REFERENCES

da Costa, M.V.B. and Bettencourt, H. (1991) 'EIA training in Portugal from a public administration viewpoint' In Environmental Impact Assessment Training and Research in the European Communities (Eds.) Wood, C. and Lee, N. Occasional Paper 27, University of Manchester, Manchester.

## APPENDIX

### Portuguese EIA legislation

Law nº 11/87: Portuguese Environmental Act

Decree-Law nº 186/90: EIA Process

Decree-Regulation nº 38/90: EIA Process

Decree-Law nº 109/91: Licensing procedures for industrial activity

Decree-Regulation nº 10/91: Licensing procedures for industrial activity

### Organisations and persons interviewed

Comissão de Coordenação da Região Centro - CCRC
Planning Commission of the Centre Region (Ministry of Planning)
President; Engº Carlos Loureiro
Vice-President: Engº João Rebelo

Junta Autónoma de Estradas - JAE
National Agency for Roads and Highways
Planning Design and Construction (Entrepreneur/Ministry of Public Works)
President: Engº Mário Fernandes
Vice-President: Engº Rangel de Lima
Director Department of Environmental Impact Assessment: Engº João Almeida

Comissão de Coordenação da Região do Algarve - CCRA
Planning Commission of the Algarve Region (Ministry of Planning)
President: Dr. David Assoreira
Regional Director of Environmental Natural Resources: Engº Campos Ferreira
Member of the Technical Staff: Engª Valentina

Associação Industrial Portuguesa - AIP
Portuguese Industrial Association
Director Department of Environment: Engª Ana Teixeira

Instituto Nacional do Ambiente - INAMB
National Institute for Environment (Ministry of Environment)
Vice-President: Dra. Adelaide Espiga
Director Department of Environmental Impact Assessment: Dra. Beatriz Chito

Direcção Geral dos Recursos Naturais - DGRN
Directorate General of Natural Resources (Ministry of Environment)
Director Department of Environmental Impact Assessment: Dr. Raul Caixinhas

Comissão de Coordenação de Região de Lisboa e Vale do Tejo - CCRLVT
Planning Commission of the Region of Lisbon and Tagus Valley (Ministry of Planning)
President: Dr. Salter Cid
Vice-President: Arqto. Biancard Cruz
Regional Director of Environment and Natural Resources: Dr. Calejo Monteiro.

Comissão de Coordenação da Região do Alentejo - CCR Alentejo
Planning Commission of the Alentejo Region (Ministry of Planning)
Vice-President: Dr. Bento Rosado
Director of Department of Environmental Impact Assessment: Dra. Lima Janeiro

Direcção Geral da Qualidade do Ambiente - DGQA
Directorate General of Environmental Quality (Ministry of Environment)
Director Department of Environmental Impact Assessment: Dra. Vitoria Bruno da Costa (also representative of Portugal at the EC Meeting of National Experts on Directive 85/337/EEC).

Liga para a Protecção da Natureza - LPN
Council (League) for Nature Protection (Environmental Defence Organisation)
President: Prof. Magalhães Ramalho

Comissão de Coordenação da Região Norte - CCRN
Planning Commission of the North Region (Ministry of Planning)
Advisor to the Commission: Prof. Paulo Pinho.

Secretary of State for Public Works (Ministry of Public Works and Transportation)
Secretary of State: Engº Alvaro Magalhães

Ministry of Environment
Representative of the Minister of Environment: Prof. Dr. Mário Figueira

Brisa - Auto-Estradas de Portugal, SA
National Company for Highway Construction and Exploitation - Brisa SA
President: Engº Monteiro da Silva

## ANNEX FOR SPAIN

### INTRODUCTION

The annex for Spain has been prepared using a variety of sources of information including consultation with government departments, competent authorities, development, conservation and other interest groups. These are listed in the appendix to this annex.

The Spanish EIA system in outlined in Figure 1.

### 1. EXTENT OF FORMAL COMPLIANCE BY SPAIN WITH THE REQUIREMENTS OF THE DIRECTIVE

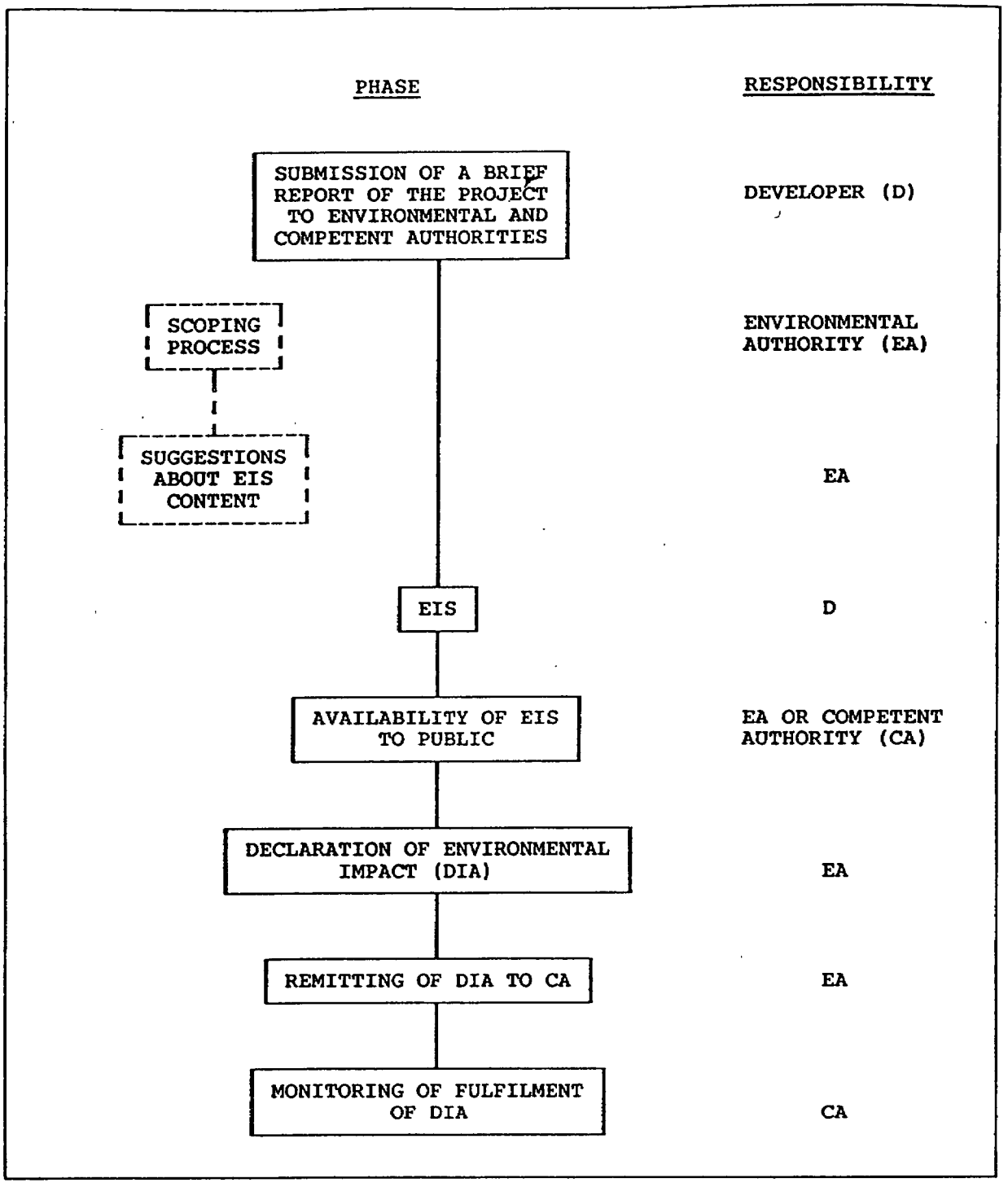
#### (a) Principal legal provisions

At national level there are two key provisions: the 'Real Decreto Legislativo' 1302/1986 (equivalent to an Act) on environmental impact assessment, and the 'Real Decreto' (Decree) 1131/1988, which sets down the procedure to implement the former. Furthermore, Act 25/1988 on highways, and Act 4/1988 on conservation of natural areas and wildlife, contain requirements for some activities to be subject to EIA.

At regional level, many different legal provisions have been enacted. All of them, if not otherwise stated, refer to EIA implementation:

- Andalucia, Order of 12 July 1988;
- Aragón, Decrees 192/1988, 118/1989 and 148/1990 on competences and procedures;
- Baleares, Decree 4/1986;
- Castilla y León, Decree 269/1989;
- Cantabria, Decree 50/1991;
- Cataluña, Decree 114/1988;
- Extremadura, Decree 45/1991;
- Galicia, Decree 442/1990;
- Navarra, Decree 245/1988, on administrative competences;
- Pais Vasco, Decree 27/1989, on administrative competences;
- Asturias, Act 1/1987 on Land Use Planning and Management (EIA is dealt with in Chapter 3);
- Islas Canarias, Act 11/1990;

Figure 1: The EIA process in Spain




- Madrid, Act 10/1991;
- Valencia, Act 2/1989 and Decree 162/1990.

(More detail about these regulations is provided in the appendix to this annex).

(b) Further analysis and possible deficiencies in formal compliance

Formal compliance with the Directive is satisfactory in general (as regards procedures, authorities, promoter responsibility, etc.), except for differences of interpretation between Spain and the Commission about Annex II projects.

In the 'Real Decreto Legislativo' exemption is automatically accorded to projects concerning national defence and to those approved specifically by a national law. Exemption by decision of the Council of Ministers is also possible 'in exceptional circumstances and by means of reasoned resolutions'. No exemption had been accorded at the time of writing. The provisions in Article 2(3) of the Directive are transposed into Reglamento 1131/1988. No national law has been passed concerning exemption.

Concerning Article 4, legal provision has been made for all the project classes listed in Annex I, but not for all the classes of projects in Annex II, to be assessed. The main remaining deficiency is the ambiguous interpretation of Article 4 of the Directive, leaving to the discretionary judgement of the Member States whether the undertaking of EIA for Annex II projects should be mandatory. Consequently, there is a lack of criteria and thresholds for the activities included in Annex II (see section 2, below). The legal provisions enacted by autonomous communities sometimes correct these deficiencies, although not for all activities. In the Act on Conservation of Natural Areas, enacted in 1989, a threshold has been established subjecting to EIA all the projects that affect a surface area larger than 100 ha. Likewise, all the plans for management of natural resources (defined in the Act) must contain a list of activities undertaken within the area affected which are to be subject to EIA. No regulation to enforce the Act has been published and no plan had been prepared at the time of writing.

With respect to Article 5, the Decrees enacted at national level provide for the supply of information from and to the developer. The same applies to Article 6 (1 and 2). In the case of the detailed consultation arrangements mentioned in Article 6(3), a general procedure to be promoted by the public administration has been established. This is voluntary but it is being

followed in most cases.

This procedure includes a definition of the public to be consulted and the places where information may be consulted. As far as the means of informing the public are concerned, the procedure consists of written communications, with fixed time limits for notification and answer: there is no public inquiry. The time limits do not appear to be reasonable as they are extremely short (10 and 30 days, respectively). As a consequence, they cannot be observed, given the shortage of people in the environmental administrations and the number of statements to be considered.

Concerning Article 7, both the EISs and the declarations must be submitted to the other country, according to national legal provisions. A current practical example relates to open cast gold mining in a river on the border with Portugal, within the region of Extremadura: the EIS was prepared by the regional authority and passed to the central agency, which sent it to Portugal. The Portuguese authorities have asked for more information and the statement had not been published at the time of writing.

Again, national Regulations provide for implementation of Articles 8 and 9. The requirements established by the Declaration of Environmental Impact are included together with the requirements established in the authorization of the project. The same weight should be accorded to these requirements as to technical aspects. The two indents of Article 9 are provided for, but no detailed arrangements are defined. Declarations are published in the Official Bulletins of the State and of the Regional Communities (see section 3 below).

Public authorities are very concerned about commercial and industrial secrecy. However, this concern has not been an important restriction on collecting information. The safeguarding of the public interest and the transmission of information to other Member States is also provided for.

The national legal provisions and some of the regional ones are somewhat stricter than the Directive with regard to EIS content, and to mandatory monitoring and surveillance

programmes. On the remaining points, they are often less strict.

Three regional communities (Castilla-La Mancha, La Rioja and Murcia) have made no additional legal provisions for EIA; in them, only national regulations apply. Other communities, on the other hand, are currently enacting laws, now in draft, with excellent detailed procedural arrangements (Andalucia and Pais Vasco).

**(d) Remedy of any remaining deficiencies**

No measures are anticipated other than those mentioned in immediately above.

**(e) Competent authorities**

The EIA is a part of the procedure for authorizing the project. Thus, the environmental authority is the one having the same territorial scope as the sectoral authority. If the technical authority is at the national level, the environmental authority must be at the same level. Likewise, if technical authorization comes from the regional level, then the environmental authority is regional.

In the Central Administration, the environmental body is, since May 1991, the State Secretariat for Water and Environmental Policies, in the Ministry of Public Works and Transport (until May 1991 it was a general secretariat and a year ago a general directorate within this Ministry).

In most autonomous communities, the environmental authority for the EIA process belongs to the environmental administration at the regional level: environmental agencies; general directorates for the environment; even regional ministries for environment or land use management and urbanism. In certain other cases, however, competence in the EIA process and in formulating the environmental impact declarations is accorded to commissions, in which there are representatives of both the sectoral and environmental administrations; in one case the regional commission only has a consultative character.

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

### (a) Outline of criteria/thresholds

No criteria or thresholds have been adopted generally. Instead, in the 'Real Decreto Legislativo' a number of activities have been selected for which EIA is always required (all of the activities in the Annex I and five in the Annex II: airports for private use, marinas, large dams, afforestation and open cast mining). For some of these, criteria or thresholds have been established in legal provisions issued later than the 1986 'Real Decreto Legislativo'. For instance, open cast mining and other activities involving land use changes of more than 100 ha, are mentioned in the Act on Conservation of Natural Areas.

The spirit of the Directive is better followed in some regions than nationally. Several have increased the number of activities subject to EIA. The Madrid, Canarias, Baleares, Cantabria and Valencia regions have included all or nearly all Annex II projects, although they are subject to a simplified EIA procedure.

(b) Comment on criteria/thresholds

The above criteria and thresholds are clear and unambiguous. In some cases they are somewhat too strict when they do not specify a minimum surface area to require the EIA (particularly in the case of afforestation). This is justified because of the reluctance of forestry institutions to consider environmental aspects in their past activities.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

(a) Number and categories of EIAs

See Tables 1 and 2.

Table 1: Projects within the competence of the Central Administration July 1988-May 1991

| | DECLARATIONS OF IMPACT: EIA PROCESS FINISHED | EIA PROCESS STARTED BUT NOT FINISHED | TOTAL NUMBER OF EIAs STARTED OR FINISHED |
|---|---|---|---|
| Roads | 13 | 184 | 197 |
| Mining | 1 | 44 | 45 |
| Large dams | 2 | 43 | 45 |
| Railroads | 2 | 1 | 3 |
| Thermal power stations | 1 | 4 | 5 |
| Chemical industries | 1 | - | 1 |
| Ports | - | 3 | 3 |
| Radioactive waste depositories | 3 | 2 | 5 |
| Total | 23 | 281 | 304 |

The environmental responsibility for these projects lies with the State Secretariat for Water and Environmental Policies.

Table 2: Projects within the competence of the autonomous administrations
July 1988 - May 1991

| | DECLARATIONS OF IMPACT (EIA PROCESS FINISHED) | EIA PROCESS STARTED BUT NOT FINISHED | TOTAL NUMBER OF EIAs STARTED OR FINISHED |
|---|---|---|---|
| Roads | 18 | 44 | 62 |
| Mining* | 198 | 606 | 804 |
| Large dams | 3 | 12 | 15 |
| Railroads | - | - | - |
| Thermal power stations | 1 | 3 | 4 |
| Chemical industries | 19 | 37 | 56 |
| Ports | 8 | 16 | 24 |
| Reafforestation | 2 | 50 | 52 |
| Urban development projects | 97 | 166 | 263 |
| Others | 34 | 183 | 217 |
| Total | 380 | 1117 | 1497 |

These projects are managed by the environmental administrations of the autonomous regions, except for Galicia, La Rioja and Extremadura.

*Mining projects are mostly small quarries and gravel pits. This is the reason for their high number. The corresponding Declarations are usually rather formal and contain little detail.

N.B. Environmental aspects can be regulated by national legislation, as is the case in Annex I projects.

**(b) Information specified in Article 5 and Annex III**

The opinions of the institutions and organizations consulted, as well as the authors, are in substantial agreement: the quality of the EISs produced is, in general, far from satisfactory. Fortunately, some trend to improve this quality can be detected because of the attitude of environmental authorities, which follow the process in detail, case by case, in spite of their lack of resources.

On the other hand, this detailed review, taken with the lack of resources and the very short time scale established (30 days) for making the Declaration, results in delays. These delays are dangerous for the survival of EIA as a meaningful process in Spain: sectoral authorities complain about delays in project authorizations, or even go ahead without the Declaration of Environmental Impact. These problems, which began to be frequent during the last year, both among public developers (e.g. of some highways sections) and private promoters (e.g. of quarries for industrial rocks and of gravel pits), are a matter of concern, as they could lead to reducing EIA to a set of worthless documents.

It is also a common opinion that sufficient attention is not paid to alternatives: tacitly or explicitly. Alternatives are not seriously considered in many cases. This fact is especially striking and symptomatic in the case of some public works, such as roads and reservoirs.

**(c) Making authorities' information available to the developer**

The environmental administration is always willing to provide information, but it is limited by one of the biggest problems in carrying out EIA: the basic environmental information is scanty and dispersed, and not stored centrally. Some developers complain that they must begin to collect information from scratch that nobody will use again. This lack of *'a priori'* information results in loss of quality, because the administrative times established are frequently too short to obtain it adequately.

The provision of information by other organisations is satisfactory, although still far from ideal, because both the NGOs and university researchers cannot answer promptly the large number of requests for information which they receive. Institutional answers are somewhat quicker.

**(d) Arrangements for publication of EIS**

The texts of Declarations of Environmental Impact are published, as a rule, in the Official Bulletins of the State or of the Autonomous Communities. Sometimes, only the fact that a

Declaration has been made and that it is available for consultation is published. When the Declaration is not published, as occurs in some cases, it is alleged that there is no definition of where or when it should be published.

There is no specific legal provision for publishing or for making available to the public the Studies of Environmental Impact (EISs). The EIS may be consulted during the period for public participation in the administrative offices, but it is not common practice to provide copies of these documents for purchase.

**(e) Arrangements for consultation and public participation**

As far as public consultation and participation are concerned, opinions diverge. On the one hand, some NGOs think that their comments are becoming simply paperwork and that little attention is paid to their responses. Some public administrations, on the other hand, state that they receive very few responses from the people and organizations consulted.

**(f) Transborder impacts**

The procedure for transboundary impacts must be followed through the Ministry of Foreign Affairs. The experience with this procedure is not good: the procedure becomes too long and, consequently, there are important delays in evaluation and in the authorization process.

**(g) Role of EIS and consultation findings in project authorization**

There is no specific mechanism for giving information either to the public or to the participants in the scoping process on the justification of particular findings in the Declaration of Environmental Impact. The measures to ensure that the Declaration of Environmental Impact is taken into account are limited in practice to the inclusion of the Declaration in the project authorization document. To evaluate this point it is necessary to consider project implementation. In this respect, there are very different responses about the fulfilment of the Declaration prescriptions. While some public developers, for example the Network of Railways (RENFE) and the National Enterprise of Radioactive Wastes (ENRESA), are making efforts to consider them, others, like the Directorate of Roads (MOPT), stand out because they do not

fulfil them. Public information is limited to that stated in (d) above.

**(h) Modification of projects**

The kind of reactions described in (g) above can be extended to the modification of projects as a result of EIA. No case of discrepancy of opinion between sectoral and environmental authorities in the authorization of projects has been recorded. At national level, only one negative Declaration of Environmental Impact has been issued; this was agreed by the sectoral administration and consequently the project (a limestone quarry) was not authorized. At regional level, some negative Declarations have been issued, mostly relating to the mining of rocks and gravel.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO SPANISH LEGISLATION AND PRACTICE

**(a) Measures to monitor implementation of Directive**

To monitor the implementation of the Directive, a Working Group has been formed in the General Subdirectorate of Environmental Quality, within the State Secretariat for Water and Environmental Policies. This is made up of representatives of the autonomous communities which meet together periodically (approximately quarterly) to unify criteria.

**(b) Provision for scoping**

There is no provision, at present, for scoping (determining the coverage of the EIA) in the Spanish system.

**(c) Quality of EISs**

It is difficult to venture an opinion about the number of EISs that reach the desirable quality; a rough estimate could be about 20%. The more common deficiencies are: poor description of the project; lack of accuracy in the selection of significant variables for the particular case; excessive attention paid to trivial points which are easy to deal with; lack of consideration of activities associated with or induced by the project (quarries, dumping sites, temporary roads); routine use of evaluation techniques which are frequently unsuited to the task; lack of reference to and/or implementation of monitoring and control; mitigation measures considered in a very general way, without proper definition in technical and economic terms.

One of the more frequent and critical deficiencies is the absence of the non-technical summary, which is a mandatory requirement strictly defined in the legislation. This document is a key element in the public participation process for the correct understanding of both the project and the EIS.

The causes of all these deficiencies are mainly two:

1. the lack of conviction amongst developers, who are determined to go ahead with a predetermined idea, and
2. unskilled evaluators (a lot of evaluations are carried out by a single person, with no or very little fieldwork, relying on the benevolence of the sectoral administration to approve the project).

**(d) Provision for formal review of adequacy and quality of EISs**

No legal provision has been made for reviewing the quality of EISs, either concerning bodies or criteria. Instead, a lot of written advice is provided: three guides about EIA have been published by the national authority (on highways and railroads, reservoirs and afforestation). Six or seven more guides were prepared nearly two years ago and are ready to go to press. It would be desirable if their publication (perhaps delayed because of budgetary reasons) could be given some priority by the General Secretariat for Water and Environmental Quality.

There is a considerable demand for these guides, both from institutions and from consultants. The Comunidad de Canarias is now working on three guides for EIA of quarries, golf courses and urban developments.

**(e) Provision for monitoring and post-auditing**

Legal provision for monitoring has been made through the mandatory Programme of Environmental Surveillance. But, in practice (as stated in (c) above), this is not considered satisfactorily in the EIS, so that a good deal of the final Declaration must be dedicated to this point. There is nothing about post-auditing EIA studies. Again (see 3(g)), some promoters

become concerned with monitoring but others do not. The problem is that some public developers are at the same time the competent authority (responsible for monitoring) and the promoter, and so it is not improbable that monitoring is abandoned. This is patently the case for State highways.

**(f) Assistance to practitioners**

See (d) above. Furthermore, some departments in the universities have published manuals and guides; recently, the Newsletter of the EIA Centre at Manchester University has been translated into Spanish and widely distributed and the Spanish EIA Centre has begun its activities, connected with the European Network. The national authority has also promoted some pilot studies.

There is a large number of training programmes related to environmental matters. In relation to EIA in particular, the provision of courses is not so prolific but the number is substantial. Fashion, and perhaps high fees, appear to be a determinant factor in this explosion, and a lot of people seem to feel themselves able to teach the subject matter. For instance, a Masters course is now being prepared by a department of wood conservation, with the help of a department of pulp and paper.

**(g) Effect on timescale, costs, etc.**

Costs and, more significantly, the timescale of projects seem to increase as a result of undertaking EIA. This is the unanimous opinion of both developers and environmental authorities, who diverge however on figures. The latter point to from 1 to 5% of total project costs, when mitigation measures are included, and a couple of months of delay. However, the former indicate that costs increase between 5 and 20% when related to the stage previous to project implementation (that is, to the planning stage, which represents in these cases a small fraction of costs of the total project). The authorities explain that the reason for delays is the lack of information and of qualified experts in their teams to deal with a high number of assessments.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

### (a) Provisions already made

The legal provisions already made in Spain are in compliance with the Directive except for interpretation of Annex II. Discrepancies between formal and practical compliance are very important. This is mainly because of:

- unsatisfactory quality of EISs;
- lack of qualified experts in environmental administrations;
- frequently, no attention is paid to fulfil the requirements established by the Declaration of Environmental Impact.

### (b) Ambiguities in the Directive

The text of Article 2 when read together with Article 4 is ambiguous. The latter seems to leave to the decision of the Member States (subject to criteria or thresholds) some points which in Article 2 seem to be mandatory.

### (c) Recommendations for more satisfactory, cost-effective compliance in Spain

- Simplified procedures for simpler cases (for instance, small mining projects, reafforestation of small areas) are needed.

- Funds to improve, both in number and in qualification, the staff of environmental administrations and to support the participation of NGOs and specialised consultants in the EIA process, in order to increase the quality of EISs and the terms of the Declarations of Environmental Impact are required.

- Most important, it is necessary to ensure the independence of the environmental authority intervening in EIA process. It is impossible to maintain, from the strictly technical and administrative efficiency viewpoints, the fulfilment of the EC Directive and of the Spanish basic legislation on EIA if the sectoral and environmental administrations are interwoven in the same Ministry or, in regions, in the parallel regional authority. In these situations, it is not possible to guarantee the independence of environmental administrations, which are always very recent and poorly endowed as compared with sectoral administrations.

The past year's experience shows the stronger influence of sectoral administrations on high level decision making, within the Ministry or parallel regional authority which comprises both sectoral and environmental administrations. There is not a single example of a case forwarded to the Council of Ministers to solve discrepancies; and it is unthinkable that the future will be different if these anomalous administrative situations are not avoided.

## APPENDIX

## Spanish Regulations on EIA (as at June 1991)

State

- REAL DECRETO LEGISLATIVO 1302/1986, 28 June, on evaluation of environmental impact (BOE, 30 June 1986).

- REAL DECRETO 1131/1988, 30 September, approving the Regulations for the implementation of the Real Decreto Legislativo 1302/1986.

- LEY (ACT) 25/1988, 29 July, of ROADS (Article 9 deals with EIA for new roads).

- LEY 4/1989, 27 March, of Conservation of Natural Spaces and of Wildlife (Second Additional Disposition and several Articles related to Plans of Management of National Resources).

Autonomous communities

- **ASTURIAS.** LEY 1/87, 30 March, of Territorial Coordination and Management.

  . DECRETO 54/90, 17 May, of the Consejería de Agricultura y Pesca, approving the normative regulating changes in forest cultures as well as new plantations.

- **CANARIAS.** LEY 11/1990, 13 July, of Prevention of Ecological Impact.

- **MADRID.** LEY 10/1991, 4 April, for Environmental Protection.

- **VALENCIA.** LEY 2/1989, 3 March, of Environmental Impact.

  . DECRETO 162/1990, 15 October, of the Consell de la Generalitat Valenciana, approving the Reglament for implementing the Ley 2/1989.

- **ARAGON.** DECRETO 192/1988, 20 December, of the Diputacion General de Aragón, distributing competences on environmental impact evaluation.

  . DECRETO 118/1989, 19 September, of the Diputación General de Aragón, on EIA procedure.

  . DECRETO 148/1990, 9 November, Diputación General de Aragón, regulating the procedure for the declaration of environmental impact in the territory of the Comunidad Autónoma de Aragón.

- **BALEARES.** DECRETO 4/1986, 23 January, of establishment and regulation of the studies of environmental impact evaluation.

- **CANTABRA.** DECRETO 50/1991, 29 April, on evaluation of environmental impact.

- **CASTILLA Y LEON.** DECRETO 269/1989, 16 November, on Environmental Impact Evaluation.

- **CATALUÑA.** DECRETO 114/1988, 7 April, on Environmental Impact Evaluation.

- **EXTREMADURA.** DECRETO 45/1991, 16 April, on Measures for Ecosystem protection in the Comunidad Autónoma de Extremadura.

- **GALICIA.** DECRETO 442/1990, 13 September, on Evaluation of Environmental Impact.

- **NAVARRA.** DECRETO FORAL 245/1988, 6 October, assigning determined functions on Evaluation of Environmental Impact matters to the organisms of the Comunidad Foral de Navarra.

- **PAIS VASCO.** DECRETO 27/1989, 14 February, defining the competent authority for applying the normative on environmental impact evaluation and toxic and dangerous wastes.

- **ANDALUCIA.** ORDEN of 12 July 1988, issuing norms to fulfil the mandatory requirement of including a study of environmental impact in the projects of the Consejería de Obras Públicas y Transportes (Public Works).

**Contacts, interviews and interchanges of opinions held with respect to application and perspectives of EC Directive on EIA in Spain**

- **ADENA/WWF** Spain

- **ADENEX** (Asociación para la Defensa de la Naturaleza y los Recursos de Extremadura) (Association for Defence of Nature and Natural Resources in Extremadura).

- **RENFE** (Red Nacional de los Ferrocarriles Españoles) (National Railways Network)

- **ENRESA** (Empresa Nacional de Residuos Radioactivos, S.A.) (National Radioactive Wastes Firm)

- **SECRETARIA GENERAL DE MEDIO AMBIENTE. MOPT.** Dirección General de Ordenación Ambiental. Subdirección General de Calidad Ambiental

- **CANARIAS.** CONSEJERIA DE POLITICA TERRITORIAL DEL GOBIERNO DE CANARIAS. Dirección General del Medio Ambiente y Conservación de la Naturaleza

- **ASTURIAS.** AGENCIA DE MEDIO AMBIENTE (Environmental Agency)

- **ANDALUCIA.** AGENCIA DE MEDIO AMBIENTE. Dirección General de Calidad Ambiental

- **NAVARRA.** DEPARTAMENTO DE ORDENACION DEL TERRITORIO, VIVIENDA Y MEDIO AMBIENTE. Dirección General de Medio Ambiente. (Department of Land Use Planning, Housing and Environment)

- **MADRID.** AGENCIA DE MEDIO AMBIENTE. Servicio de Informes y Declaración de Impactos (Service of Reports and Declarations of Impact)

- **PAIS VASCO.** DEPARTAMENTO DE URBANISMO, VIVIENDA Y MEDIO AMBIENTE. Servicio de Impacto Ambiental. (Department of Urbanism, Housing and Environment)

- **PAIS VASCO.** DIPUTACION FORAL DE VIZCAYA. Departamento de Urbanismo y Medio Ambiente (Department of Urbanism and Environment)

- **VALENCIA.** AGENCIA DE MEDIO AMBIENTE. Servicio de Calidad Ambiental (Service of Environmental Quality)

- **UNIVERSIDAD DE SEVILLA.** ESCUELA TECNICA SUPERIOR DE INGENIEROS INDUSTRIALES. Departamento de Ingeniería Química y Ambiental

- **UNIVERSIDAD AUTONOMA DE MADRID.** UNIVERSIDAD COMPLUTENSE DE MADRID. Departamento de Ecología

- **UNIVERSIDAD POLITECNICA DE MADRID.** Departamento de Proyectos y Planificación Rural.

# ANNEX FOR THE UNITED KINGDOM

## INTRODUCTION

The annex for the United Kingdom (UK) has been prepared using a variety of sources of information, including consultations with a wide range of authorities and other organisations within the country. These have included government departments, competent authorities, designated environmental authorities, developers, consultancies and environmental interest groups, as well as individual experts. The authors are grateful for the many useful contributions they have received from their respondents. However, the contents of this review are the sole responsibility of the authors and any views expressed are not necessarily shared by all of those consulted.

The annex is structured according to the five main objectives of the study, namely: the extent of formal compliance by the UK with the requirements of Directive 85/337/EEC; the criteria and/or thresholds adopted by the UK for the selection of Annex II projects to be subject to assessment; the nature and extent of practical compliance with Directive 85/337/EEC in the UK; specific aspects of the Directive's translation into UK legislation and practice; and an overall assessment of the effectiveness of the Directive's implementation in the UK, and of difficulties in its implementation.

## 1. EXTENT OF FORMAL COMPLIANCE BY THE UNITED KINGDOM WITH THE REQUIREMENTS OF THE DIRECTIVE

### (a) Principal legal provisions

The UK has, as at the beginning of July 1991, implemented Directive 85/337/EEC through 17 different regulations; two further regulations relating to Northern Ireland were in preparation. All of these are listed in the appendix to this annex. The majority of the project categories listed in Annex I, and of the project categories and sub-categories listed in Annex II, are covered under the planning regulations. However, certain project classes, and project categories and sub-categories are covered by the other regulations (e.g. afforestation, major roads). It should be noted that the UK has adopted the term 'environmental assessment' or EA for the EIA process, and the 'environmental statement' or ES refers to the document setting out the developer's assessment of the project's likely environmental effects, which is submitted with the application for consent.

(b) Further analysis and possible deficiencies in formal compliance

An analysis based upon the key articles of the Directive, reveals how the Directive has been brought into effect in the UK and where any deficiencies in formal compliance may remain. The Directive does not apply to projects approved by specific acts of national legislation, according to the provisions in Article 1(5). It is the view of the UK Government that where, but for this provision, EA would have been required for a project, the promoter of the legislation should provide an ES for consideration by the appropriate Parliamentary committee. The Standing Orders of each of the Houses of Parliament have been amended to require an ES to be submitted with any Bill to approve such a project (House of Commons, Hansard, 20.5.91, col.739-740; House of Lords, Hansard, 15.7.91).

All projects in the classes listed in Annex I are subject to EA. Exemptions may be made by the appropriate Secretary of State for a particular proposed development under the planning regulations for England and Wales but this would only be granted in exceptional circumstances. So far no exemptions have been made under these or any of the other regulations. There are no specific provisions in the regulations for notifying the European Commission of any such exemptions, but the Secretary of State has stated that he will ensure compliance with the requirements of Article 2(3). In Scotland there is provision for the exemption, by the Secretary of State, of Annex I projects subject to the Electricity Act consent procedures, but no exemptions have been granted to date. The regulations applying to other Annex I projects do not provide for exemptions.

Of the categories and sub-categories of projects listed in Annex II, the following are not subject to EA by any of the UK EA regulations:

- 1 (a) projects for the restructuring of rural land holdings; and
- 1 (b) projects for the use of uncultivated land or semi- natural areas for intensive agriculture purposes.

Projects in these categories are judged, by the UK Government, as unlikely to occur in the UK in a form that would require an EA in accordance with the Directive.

Legislation contained within the Planning and Compensation Act 1991, allows the extension of EA to projects other than those listed in Directive 85/337 where those projects require planning permission. It is understood that the UK EA regulations are already to be interpreted to include modifications to Annex II projects, where these are likely to give rise to significant environmental effects.

The competent authority or the Secretary of State determines whether EA is required on a case-by-case basis. General advisory criteria have been prepared to help authorities and the Secretary of State assess whether Annex II projects are likely to have significant environmental effects, supplemented by more specific indicative criteria and thresholds for certain categories and sub-categories. These are discussed more fully in Section 2 below. The UK has not adopted any other methods for selecting Annex II projects to be subject to EA.

Since the Directive has been implemented in the UK by means other than primary legislation through integration into existing consent procedures, some elements of the Directive's provisions (e.g. details relating to consultation of the public) are absent from the text of several of the EA regulations. However, these specific elements are covered by other primary legislation or previous regulations. Therefore the EA regulations relating to those procedures should be read in conjunction with these other primary laws and statutory regulations when determining the extent of formal compliance with the Directive.

The EA regulations provide that the information to be supplied by the developer is that specified in Article 5(2), together with the requirements of Article 3 of the Directive, and this must be supplied for all types of projects; for some regulations this is referred to as "the specified information". Most of the regulations allow for the submission of the other information listed in Annex III, "by way of explanation or amplification of the specified information".

Provision is made for information held by the relevant authorities to be supplied to the developer (Article 5(3)) by all the regulations except the Scottish roads regulations (such information could be obtained under other legislation), the highways regulations (although in practice the relevant authorities are expected to provide such information), and all the regulations

dealing with harbour works for England, Wales, and Northern Ireland. If the need for such information should arise in these latter cases, it would be dealt with administratively. The relevant authorities are not obliged to supply any information held in confidence.

All the regulations make some provision to designate appropriate environmental authorities, and to ensure that the information gathered pursuant to Article 5 is supplied to them, and that the opportunity exists to express their opinion before the decision is finalised on the project (Article 6(1)). The means of denoting these authorities or bodies ranges from a specific listing within the regulations concerned, to those specified by the appropriate Secretary of State or Minister having environmental responsibilities (see Table 1 for further details).

The majority of the UK EA regulations provide for the information gathered pursuant to Article 5 to be made available to the public, and for the public to have an opportunity to express an opinion before the project is initiated (or consent given). The harbour works regulations (SI No. 1336) make no such provisions, but the Department of Transport has indicated that this requirement would be implemented administratively; developers would be advised to present an ES as part of the information accompanying their application, which is made available to the public.

The majority of the UK EA regulations contain fairly detailed mandatory arrangements for the provision of information to, and consultation with, the public (Article 6(3)). For most of the regulations all the indented items within Article 6(3) are covered. The exceptions are the harbour works regulations (SI No. 1336), the Scottish roads regulations, and the Scottish drainage works regulations, where arrangements for provision of information to, and consultation with, the public are, contained within previous legislation. The public concerned is usually determined as those in the locality of the proposal, although for some regulations the definition is broader. In the case of some of the regulations "those appearing to have an interest in the land" are also specifically contacted.

Except where already noted above, all the regulations specify a location where the information gathered pursuant to Article 5, i.e. the environmental statement, can be inspected.

In the case of over half of the regulations the location is to be specified on a case by case basis, whilst for others the information is to be held at the offices of the local planning authority, or the local post office (SI No. 1218). Applications under the planning and electricity and pipe-line regulations are placed on the planning register and are available for inspection by the public. Copies of the ES may also be consulted at local libraries, in the case of power stations and

**Table 1: UK Regulations and provisions for consultation and participation of authorities with specific environmental responsibilities**

| Regulations | Authorities to which information is to be supplied | Opportunity to express an opinion? |
|---|---|---|
| Town and Country Planning (1988) (SI No. 1199) | List of various bodies, including environmental authorities, local planning authorities, etc. | Yes. |
| Environmental Assessment (Scotland) (1988) (SI No. 1221) | Schedule of bodies to be consulted, but does not apply to section on drainage works; also for section relating to roads, Secretary of State will ensure that the appropriate environmental body is approached if a statutory site is affected. | Yes, but with provisos in previous column. |
| Salmon Farming in Marine Waters (1988) (SI No. 1218) | Schedule of authorities, bodies and persons to be consulted where appropriate. | Yes, where appropriate. |
| Afforestation (1988) (SI No. 1207) | NCC, CC, local authorities and other statutory bodies which appear to have an interest. | Yes. |
| Land Drainage Improvement (1988) (SI No. 1217) | NCC, CC and any other public authorities, statutory bodies, or organisations which appear to have an interest. | Yes. |
| Highways (1988) (SI No.1241) | If a statutory site is affected the Secretary of State shall ensure contact with appropriate environmental body. | Yes. |
| Harbour Works (1988) (SI No. 1336) | Duty of Secretary of State to provide bodies appearing to have environmental responsibility, as he thinks fit, with material. | Yes. |
| Harbour Works (1989) (SI No. 424) | Minister may direct developer to supply such bodies as he may specify as appearing to him to have environmental responsibilities. | Yes. |
| Electricity and Pipe-line Works (1990) (SI No.442) | Principal council for area, CC, NCC, HMIP. | Yes. |
| Roads (Northern Ireland) (1988) (SR No. 344) | Statutory bodies whose interests appear to the Department of the Environment to be affected by the proposal. | Yes. |
| Planning (Northern Ireland) (1989) (SR No. 20) | District councils and other statutory bodies as appear to have an interest in the proposal. | Yes. |
| Forestry (Northern Ireland) (1989) (SR No. 226) | District councils and other public authorities and statutory bodies which appear to have an interest in the project. | Yes. |
| Harbour Works (Northern Ireland) (1990) (SR No. 181) | Such bodies as appropriate Department specifies as appearing to it to have environmental responsibilities. | Yes. |

overhead lines, as well as at the offices of the electricity company in the case of the latter. The time available for consulting the information varies from 21 days to 42 days, although no specific limits are given in the planning regulations for Northern Ireland, and the planning regulations for England and Wales since this is dealt with in previous legislation. The way in which the public are informed of a proposal is through publication in local newspapers - usually in at least

one, but sometimes in at least two. For proposals in Scotland, publication must also take place in the Edinburgh Gazette. For proposals under the salmon farming

in marine waters regulations, publication should be in a local newspaper and either the Edinburgh or London Gazette. All the regulations stipulate that the public should make representations in writing, with time limits varying from 7 days to 49 days. Again, no time limits are specified in the planning regulations for Northern Ireland, the Scottish planning regulations, and the planning regulations for England and Wales; these are dealt with in previous legislation. Some of the regulations (planning regulations, roads regulations, and harbours and docks regulations for Northern Ireland, and harbour works (No. 2) regulations (SI No. 424)) make provision for a public inquiry for specific proposals, where necessary.

None of the UK EA regulations make provision for matters covered by Article 7 of the Directive. However, it is expected, by the UK Government, that because of their geographical location very few, if any, projects proposed in England, Scotland and Wales will have significant environmental effects in other Member States. It has stated that the appropriate government department considers every ES and the UK Government will notify any other Member State when it appears likely that their environment will be significantly affected by a project. Internal arrangements exist whereby the regional offices of the Department of the Environment (DOE), and also other government departments, are requested to consider ESs with Article 7 in mind. If the project is one where this article might be applicable the competent authorities are asked to advise DOE and also to send them a copy of the ES. Similar arrangements exist for Northern Ireland and, in addition, informal consultation arrangements have been established between DOE for Northern Ireland and the Department of the Environment for the Republic of Ireland. The consultation arrangements have been activated for one project. The UK Government is also a signatory to the Convention on Environmental Impact Assessment in a Transboundary Context.

All of the UK EA regulations, with the exception noted below, contain provisions to ensure that information gathered pursuant to Articles 5,6 and 7 is taken into consideration in the development consent process (Article 8). The harbour works (SI No. 1336) regulations do not

contain provisions for considering the opinions of the public but it is understood, this would be dealt with administratively. None of the regulations contain any reference to consideration of the views of neighbouring Member States. However, the UK Government has stated that any such comments would be drawn to the attention of the decision making body which would be expected to take them into consideration before deciding whether a project should proceed.

The UK EA regulations contain varying provisions to ensure that the competent authorities provide the public with information relating to the content of a decision, and the reasons and considerations on which the decision is based (Article 9). No provisions are contained in the Scottish drainage regulations; however, provision is made in other, earlier, drainage regulations. Provision is made in the following regulations to communicate the decision only: forestry regulations for Northern Ireland - in the local newspapers and in writing to those making representations; harbour works regulations (SI No. 1336) - as the Secretary of State sees fit (provision of reasons and any conditions would be handled administratively); the forestry regulations - in at least two local newspapers and in writing to those making representations; the following Scottish regulations, planning - those consulted and those with an interest in the land; electricity and specific developments in new towns - those consulted, and a copy is also made available; roads. Projects subject to the planning procedures in England, Wales, Northern Ireland and projects approved under the electricity and pipe-line regulations must have the decision letter, including the reasons and any conditions, placed on the planning register for public inspection. The decision letter is also sent to all those registered as "objectors" to the scheme. The remaining regulations make provision for communication of both the decision, the reasons for the decision and any conditions attached. This information is communicated via at least one local newspaper, by the Northern Ireland roads regulations, and in writing to those consulted or making representations, in the case of the harbour works regulations SI No. 424 (published as the Secretary of State sees fit); for the drainage works improvement regulations (if the Minister so decides and there is no barrier to making this information public); for the harbours and docks regulations for Northern Ireland; and for the marine salmon farming regulations. For the other regulations this article is implemented through other regulations and Acts. If a neighbouring Member State is involved, the UK Government has stated that it would communicate the decision, along with the reasons and any conditions, to that Member State.

The UK EA regulations do not contain any provisions to respect limitations imposed by industrial and commercial secrecy and the safeguarding of the public interest, or relating to the transmission of information between Member States (Article 10). However, the EA process does not require any further information than, for example, could be required under existing development consent procedures. Six of the UK EA regulations contain provisions regarding confidentiality, but, these relate solely to the provision of information to the developer for preparation of the ES.

Those consulted during the course of this study are generally, though not universally, of the view that the measures undertaken by the UK are in broad agreement with the letter of Directive 85/337/EEC. However, some of the above consider that formal compliance is minimalist, with the spirit of the Directive not always being fully reflected (e.g. the adoption of Article 5(2) as the minimum information that must be provided). One point of concern to some people is that only a grant consent procedure and not a development consent procedure exists for certain types of development subject to EA, i.e. for afforestation. Some developments of these types may not require a grant, including the Forestry Commission's own proposals, and in these cases the requirement for EA is not mandatory. However, the Forestry Commission has stated it will apply the principles of the regulations to its own afforestation projects. A further area of concern to some is the advisory status of the criteria and thresholds applied to Annex II projects.

**(d) Remedy of any remaining deficiencies**

Two further sets of regulations for Northern Ireland were in preparation at July 1991, relating to flood relief work and discharges to water. The latter regulations were expected to be in place by the end of 1991.

**(e) Competent authorities**

The competent authorities designated as responsible for performing the duties arising from Directive 85/337 in the UK are those responsible for approving the project or for authorizing a grant, whether it is a government department or another such body (see Table 2 for details).

**Table 2: Competent authorities responsible for dealing with UK regulations**

| Regulations | Competent Authorities |
|---|---|
| Town and Country Planning (1988) (SI No. 1199) | Local planning authority or appropriate Secretary of State |
| Environmental Assessment (Scotland) (1988) (SI No. 1221) | Local planning authority or appropriate Secretary of State |
| Salmon Farming in Marine Waters (1988) (SI No. 1218) | Crown Estate Commissioners |
| Afforestation (1988) (SI No. 1207) | Forestry Commission |
| Land Drainage Improvement (1988) (SI No. 1217) | Drainage bodies, *or* Minister of Agriculture, Fisheries and Food, *or* Secretary of State for Wales |
| Highways (1988) (SI No.1241) | Secretary of State for Transport *or* Secretary of State for Wales |
| Harbour Works (1988) (SI No. 1336) | Minister of Agriculture, Fisheries and Food, *or* Secretary of State for Transport *or* Secretary of State for Wales |
| Harbour Works (1989) (SI No. 424) | Minister of Agriculture, Fisheries and Food, *or* Secretary of State for Transport *or* Secretary of State for Wales, *or* Secretary of State for Scotland |
| Electricity and Pipe-line Works (1990) (SI No.442) | Secretary of State for Energy |
| Roads (Northern Ireland) (1988) (SR No. 344) | Department of the Environment (Northern Ireland) |
| Planning (Northern Ireland) (1989) (SR No. 20) | Department of the Environment (Northern Ireland) |
| Forestry (Northern Ireland) (1989) (SR No. 226) | Department of Agriculture for Northern Ireland |
| Harbour Works (Northern Ireland) (1990) (SR No. 181) | Department of the Environment (Northern Ireland) *or* Department of Agriculture for Northern Ireland |

## 2. CRITERIA AND/OR THRESHOLDS ADOPTED FOR THE SELECTION OF ANNEX II PROJECTS TO BE SUBJECT TO ASSESSMENT

### (a) Outline of criteria/thresholds

The various UK regulations make provision for the competent authority to consider case by case whether a project in Annex II is likely to have significant environmental effects so as to require an EA, but do not specify any mandatory criteria or thresholds. Advisory criteria, and thresholds for certain Annex II projects, have been published by Government departments for guidance purposes only (DOE/WO, 1988; SDD, 1988; DOE(NI), 1989; Forestry Commission, 1988; Crown Estate Office, 1988; Department of Transport, 1989). These relate to projects subject to the planning regulations for England and Wales, Scotland, and Northern Ireland, afforestation, marine salmon farming and highways. Table 3 summarises the particular thresholds applicable to a selection of different types of projects. However, the criteria and thresholds need to be read in the context of the general guidance given in the same documents. In all cases, the fundamental test for each case, whether there are advisory thresholds or not, is whether in the view of the competent authority the proposed project is likely, on the facts, to have significant environmental effects. The three main criteria of significance to be applied relate to the scale, location and types of effects associated with the project in question (DOE/WO, 1988).

### (b) Comment on criteria/thresholds

Opinions amongst a sample of the competent authorities required to use the quantified indicative criteria, who have been consulted on this issue, are divided as to whether they are appropriate or not (Wood and Jones, 1991). Amongst those consulted it was, in general, felt that EA in the UK was being applied to appropriate types and numbers of projects. However, some of those consulted in the preparation of this Annex commented that the interpretation of the term "significant effects" by local planning authorities has been variable. Designated environmental authorities consider that it would be beneficial if they were consulted, and greater weight given to their views, at an early stage when these criteria and thresholds are being used and when the requirement for an EA is being decided. In the UK Government's view, the likely significance of a project's environmental effects should normally be evident from the information provided by the developer, bearing in mind the relevant guidance; the designated environmental authorities should, however, be consulted in case of doubt.

## 3. NATURE AND EXTENT OF PRACTICAL COMPLIANCE WITH THE DIRECTIVE

### (a) Number and categories of EISs

**Table 3: Examples of indicative criteria and thresholds for Annex II projects***

| Project category | Criteria and thresholds |
|---|---|
| Agriculture<br>Afforestation | EA will certainly be required where more than 100 ha is proposed for planting with within designated areas. |
| New poultry rearing installations | ... those designed to house more than 100,000 broilers or 50,000 layers, turkeys or other poultry may require EA. |
| New pig rearing installations | ... those designed to house more than 400 sows or 5,000 fattening pigs may require EA. |
| Salmon farming | ... production of more than 100 tonnes of fish per year may require EA.<br>*or*<br>total cage area of more than 6,000m$^2$ within a 2km radius in certain defined areas.<br>*or*<br>total cage area of more than 12,000m$^2$ within a 2km radius in any other areas. |
| Extractive industry<br>Opencast coal mines and sand and gravel workings | ... sites of more than 50 ha may require EA, and significantly smaller sites could require EA if they are in a sensitive area or if subjected to particularly obtrusive operations. |
| Infrastructure projects<br>Industrial-estate development projects | EA may be required where the site area is in excess of 20 ha.<br>*or*<br>significant numbers of dwellings in close proximity (e.g. more than 1,000 dwellings within 200m of the site boundaries). |
| Urban development projects | Schemes may require EA where the site area is more than 5 ha in an urbanised area,<br>*or*<br>there are significant numbers of dwellings in close proximity (e.g. more than 700 dwellings within 200m of the site boundaries),<br>*or*<br>a total of more than 10,000m$^2$ (gross) of shops, offices or other commercial uses would be provided. |
| Local roads<br><br><br><br><br><br><br>Trunk roads | Outside urban areas, EA may be required for the construction of new roads and major road improvements over 10km in length,<br>*or*<br>roads over 1km in length if passing through a national park or through or within 100m of a site of special scientific interest, a national nature reserve or a conservation area.<br><br>Within urban areas, any scheme where more than 1,500 dwellings lie within 100m of the centre line of a proposed road, may be a candidate for EA.<br><br>EA will be required for highways over 10km in length. |
| Other infrastructure projects | Projects requiring sites in excess of 100 ha may require EA. |
| Other projects<br>Waste disposal | Installations with a capacity of more than 75,000 tonnes per year may require EA. |
| Manufacturing industry generally | New plants requiring sites in the range 20-30 ha, or above, may require EA. In addition EA may occasionally be required on account of expected discharge of waste, emission of pollutants, etc. |

* Because of limitations of space, only an abbreviated summary of each selected threshold or criterion is provided. Refer to DOE (1989) for fuller descriptions. In all cases the overriding criterion is whether the development is likely to have significant environmental effects.

Information concerning the numbers of ESs produced in the UK has been compiled by the EIA Centre for the period 15 July 1988 to 31 December 1990 (Jones, Lee and Wood, 1991). The total number of ESs known to have been submitted to the authorities for this period was

472. Table 4 shows the project categories for which these were prepared. The principal categories were:

- in Annex I, power stations, roads and waste disposal installations; and
- in Annex II, extractive industry, infrastructure projects and other projects.

It is noteworthy that a relatively small number of ESs has been prepared for industrial projects.

Table 5 shows the UK regulations under which the ESs were prepared. The majority (60%) were prepared under the planning regulations for England and Wales. The Environmental Assessment (Scotland) Regulations accounted for 11% of the ESs prepared, while the land drainage improvement works, the highways regulations and the electricity and pipe-line works regulations each accounted for approximately 7% of the ESs prepared.

**(b) Information specified in Article 5 and Annex III**

The extent, and degree, to which developers are providing, in their ESs, the information specified in Article 5 and Annex III of the Directive is difficult to assess. Particular types of impacts may not be covered in individual ESs either because they are not significant or because they have been overlooked. In a number of cases the range of impacts covered appears to be broadly satisfactory.

## Table 4: Project categories of EISs known to have been submitted to UK authorities 15-7-88 to 31-12-90

| Category | Number of EISs |
|---|---|
| Annex I | |
| 1: Crude oil refineries, gasification of coal | 1 |
| 2: Power stations | 15 |
| 3: Radioactive waste | 0 |
| 4: Iron/steel works | 0 |
| 5: Asbestos works | 1 |
| 6: Integrated chemical installations | 1 |
| 7: Roads, railways, airports | 14 |
| 8: Ports | 4 |
| 9: Waste disposal | 19 |
| **All Annex I projects** | 55 |
| Annex II | |
| 1: Agriculture | 25 |
| 2: Extractive industry | 68 |
| 3: Energy production | 22 |
| 4: Processing of metals | 6 |
| 5: Manufacture of glass | 0 |
| 6: Chemical industry | 11 |
| 7: Food industry | 3 |
| 8: Textile, leather, wood and paper industries | 5 |
| 9: Rubber industry | 0 |
| 10: Infrastructure | 198 |
| 11: Other | 72 |
| Mixed 10: and 11: | 6 |
| 12: Modifications | 1 |
| **All Annex II projects** | 417 |
| All (Annex I and Annex II) projects | 472 |

## Table 5: Numbers of ESs prepared under UK regulations - 15-7-88 to 31-12-90

| UK regulations | Number of ESs |
|---|---|
| Town and Country Planning - England and Wales (SI No. 1199) | 283 |
| Environmental Assessment - Scotland (SI No. 1221) | 51 |
| Salmon Farming in Marine Waters - England, Wales, Scotland (SI No. 1218) | 1 |
| Afforestation - England, Wales, Scotland (SI No. 1207) | 16 |
| Land Drainage Improvement Works - England and Wales (SI No. 1217) | 36 |
| Highways - England, Wales (SI No. 1241) | 39 |
| Harbour Works - England, Wales (SI No. 1336) | 0 |
| Harbour Works - England, Wales (SI No. 424) | 0 |
| Electricity and Pipe-line Works - England, Wales (SI No. 442) | 33 |
| Roads - Northern Ireland (SR No. 344) | 1 |
| Planning - Northern Ireland (SR No. 20) | 6 |
| Afforestation - Northern Ireland (SR No. 226) | 1 |
| Harbour Works - Northern Ireland (SR No. 181) | 0 |
| Total | 467 |

**N.B. At least 5 ESs are known to have been prepared for Acts of Parliament**

However, one study relating to a sample of planning ESs, found that many developers included only the 'specified information' required by Schedule 3 (based on Articles 3 and 5(2) of the Directive) (Wood and Jones, 1991). Much of the information requirements of Annex III are regarded as non-mandatory in the UK. The coverage of alternatives, risks of accidents and, to some degree, indirect and cumulative impacts, often appears to be incomplete (Jones, Lee and Wood, 1991). Only a minority of ESs include any consideration of alternatives; in some cases the consideration of alternatives is not considered applicable. However, in the case of motorways and trunk roads, the appropriate Government department consults the public at an early stage on a number of alternative proposals. Where such alternatives would have significantly different effects from those of the published scheme for which the ES has been provided, the ES includes a summary description of the main alternatives and the reasons for the choice of the published scheme.

**(c) Making authorities' information available to the developer**

Where authorities with relevant information in their possession are required to make this available to the developer, to facilitate preparation of the ES, they are, in the majority of cases, doing so. In some cases a charge is being made for the provision of such information. In some instances developers are choosing to prepare ESs without consulting these authorities, or indeed the competent authority concerned.

**(d) Arrangements for publication of EIS**

In general, it is considered that the situation in the UK is satisfactory concerning the publication of ESs and their availability for consultation once they have been submitted. Copies can, in most cases, be obtained from either the developer or the competent authority concerned. Where the information was available to the EIA Centre, just under half of 290 ESs were available free of charge, with 18% available for purchase at £20 or less, and the remaining 33% available at more than £20. In most cases copies of ESs are available, particularly in the specific locality where an application for consent is submitted. However, in a few cases copies of ESs are only available for consultation, but not for purchase by the public. Also, the absence of a central, up-to-date, listing of all ESs sometimes makes locating copies for purchase or consultation difficult.

(e) Arrangements for consultation and public participation

Consultation with designated environmental authorities, by the competent authorities, after the ES has been submitted, seems on the whole to be working reasonably well, although there have been instances where they have not been consulted at all (Wood and Jones, 1991). Generally, the public and other environmental interest groups are also given an opportunity to express an opinion about a proposal before any decision is taken. In several cases the developer has consulted the competent authority and the designated environmental authorities on an informal basis, before the submission of the ES. In some cases the public and environmental interest groups have also been contacted before submission of the ES. However, these latter groups are usually consulted less frequently and in less depth.

(g) Role of EIS and consultation findings in project authorization

The uses made of the ES, and of the consultations based on it, by the competent authorities in the decision-making process are difficult to assess. Sometimes decisions appear to have been based on poor ESs and/or inadequate information. However, more research is needed in this area before definitive conclusions can be reached. The decisions reached, including reasons and any conditions, are made available to the public, where this is provided for by the UK regulations.

(h) Modification of projects

It is also difficult to judge the extent to which undertaking an EA has led to the modification of a project, although modifications have definitely been made to some projects (Wood and Jones, 1991). The process of project design and its progress through the development consent procedure tends, by its nature, to be one of change and modification at many points. Early initiation of the EA process is felt by several of those consulted to have been a contributory factor in modifying the design of a number of projects to reduce adverse environmental effects.

## 4. SPECIFIC ASPECTS OF THE DIRECTIVE'S TRANSLATION INTO UNITED KINGDOM LEGISLATION AND PRACTICE

(a) Measures to monitor implementation of Directive

Monitoring the implementation of the Directive in the UK is undertaken in different ways. DOE maintains and publishes details of planning cases subject to EA in Great Britain (i.e. England, Wales, and Scotland). The information published relates to ESs submitted, to "directions" and "opinions" as to whether an EA is required, and "notifications" that an EA has been requested. For each case the name of the relevant competent authority is given, together with a brief indication of the nature of the project, and the category of the project according to the UK regulations. Where relevant, the reasons for DOE/SO/WO directing that an EA is necessary are also briefly stated. When a decision has been made on a project this is also published, together with the date of the decision. The Planning Service of DOE Northern Ireland monitors implementation on a quarterly basis and advises DOE (London) of the determinations made, ESs received, etc.

A DOE commissioned study on the implementation of the Directive for planning projects in England, Wales and Scotland over the period July 1988 to December 1989, recently reported on the adequacy of the monitoring arrangements for planning ESs. It found that these were generally valuable, but that there was some under-recording taking place and made a number of recommendations to strengthen existing practice (Wood and Jones, 1991).

For non-planning projects, lists of cases subject to EA are maintained by the relevant competent authorities. These lists typically contain a brief description of each case, i.e. the name of the developer and either a title, or some indication of the nature, of the proposal. The lists are generally available on request from the relevant competent authority. Department of Transport regional offices are asked to provide headquarters with copies of published ESs for monitoring of their contents.

The absence of a system for centrally recording <u>all</u> ESs, relating to planning and non-planning cases, is considered a weakness in the present monitoring arrangements, as is the absence of a system for centrally depositing copies of all ESs (Jones, Lee and Wood, 1991).

**(b) <u>Provision for scoping</u>**

There are no mandatory provisions for 'scoping' an assessment in the UK. It is for the

developer to identify the aspects that the ES should concentrate on, having regard to the nature, size and location of the project, and its likely effects on the environment. In the circulars produced as guidance to the planning regulations, for England, Wales and Scotland, developers are recommended to consult the competent authorities and designated environmental authorities at an early stage in the planning of a project to discuss which features of the project will need most attention in the ES. However, the extent to which this happens is known to be very variable. The short guidance document produced to supplement the forestry regulations states that, "Information about environmental effects which are not likely to be significant is not required" (Forestry Commission, 1988). The brief note produced by the Crown Estate Office, for those intending to submit applications under the salmon farming in marine waters regulations, encourages developers to check with that Office at an early stage in the preparation of lease applications regarding the scope of the ES (Crown Estate Office, 1988).

**(c) Quality of ESs**

It is apparent that the ESs produced since the EA regulations have come into force have been of variable quality ranging from very satisfactory to very unsatisfactory, and this has been demonstrated in a number of published and unpublished studies (Lambert and Wood, 1990; Lee and Colley, 1990; Smith, 1990; Lee, 1991; Wood and Jones, 1991). Areas of particular weakness identified in the above studies include the description of types and quantities of wastes created; the identification and scoping of potential impacts; qualitative rather than quantitative treatment of impacts; risk of accidents; assessment of impact significance; bias and misplaced emphasis in presentation; poor writing and presentation of often very diverse information; and the lack of a non-technical summary. Several factors appear to have contributed to the poor quality of many ESs, including:

- lack of experience of EA, intensified by lack of guidance and training;

- bias, particularly where the developer and the competent authority belong to the same authority;

- not starting the EA process early enough, although the inherent limitations of environmental assessments confined to the project stage also need to be recognised; and

- lack of satisfactory scoping.

A majority of the sample of 1988 and 1989 ESs that have been evaluated were assessed to be of unsatisfactory quality. However, there are indications that, with increased experience, the overall quality of EISs is improving; 60% of a sample of 1990-1 ESs were assessed as of satisfactory quality, although half of these were only considered to be marginally satisfactory (Lee, 1991).

**(d) Provision for formal review of adequacy and quality of EISs**

The UK Government has not officially established any provisions in its EA regulations, for the formal review of the adequacy and quality of ESs, nor is there an official, independent review body in existence in the UK. However, the competent authorities have powers, contained in other existing laws and regulations, to evaluate an ES. The competent authority is required (in all cases) to have regard to the ES, as well as any other material considerations, when determining an application. For some of the regulations (e.g. planning regulations) the competent authority can request the submission of further information. A planning application cannot be refused because of an inadequate ES, but it can be refused on the grounds that insufficient information has been provided for its determination (DOE/WO, 1989). In general, the competent authority assesses the ES using its own 'in-house' knowledge and experience, and the comments of other public authorities. In some instances outside consultants and other organisations are also used to comment on ESs. It would seem, nevertheless, that a number of ESs which are apparently inadequate are being accepted by competent authorities. The UK Government has indicated that it intends to issue guidance to competent authorities on the evaluation of ESs and other environmental information.

**(e) Provision for monitoring and post-auditing**

There are no provisions within the EA regulations themselves for monitoring the

environmental impacts of projects after their implementation, nor for the post-auditing of EA studies. No official written guidance has been published on EA monitoring and post-auditing in the UK. However, under other existing laws and regulations the powers exist to attach monitoring conditions for certain consent procedures, and these are used in certain cases. In addition, the environmental effects of the operation of industrial plants and other installations, whether or not these have been subject to EA at the planning stage, may be monitored by Her Majesty's Inspectorate of Pollution, the National Rivers Authority, the Health and Safety Executive and local authorities.

**(f) Assistance to practitioners**

A list of EA guidance material produced by government departments and agencies for England, Wales and Scotland is given in the Appendix to this annex. Most of this has been of a procedural nature; guidance on EA practice and methods has been more limited, though it should increase in the near future.

The guidance issued includes circulars, memoranda, and short procedural guidance. The DOE has produced a helpful guide to the UK EA procedures, mainly dealing with the planning regulations in England and Wales. DOE, SO and WO have also produced leaflets, for the public. DOE (Northern Ireland) has produced several internal circulars, and makes frequent use of the guide to the EA procedures (see above). The Department of Transport is also currently revising its Manual of Environmental Appraisal (DTp, 1983) which sets out details of the issues to be assessed, and methods to be used, for motorway and trunk road schemes in England and Wales. A similar manual, prepared in 1986, is available in Scotland (SDD, 1986). A short booklet relating to forestry schemes has been supplemented by guidelines relating to water, landscape and conservation; guidelines for archaeology will be produced shortly. Revised guidance on the location and siting of marine fish farms, which will include consideration of EA, is also being produced by the Scottish Office. The Department of Energy has commissioned the preparation of a guidance note for the EA of pipeline proposals. The Ministry of Agriculture, Fisheries and Food (MAFF) provides guidance on a case by case basis. The DOE has recently commissioned practical guidance relating to the preparation of ESs, which will be directed at a wide audience. DOE intends to issue guidance on the EA procedures for projects approved by

approved by private Act of Parliament. DOE is also, as stated above, to commission guidance on the evaluation of environmental information, including the ES. This is expected to consider quality issues and the use to be made of the environmental information for decision-making purposes.

Other authorities and bodies have produced some EA guidance material. The Countryside Commission for England and Wales published a guidance note on EA and landscape and recreation issues, for use by their officers, by developers, and by local authorities (Countryside Commission, 1991). The Passenger Transport Executive Group has commissioned procedural and broad technical guidance on EA for major passenger transport schemes. The Council for the Protection of Rural England has produced a short pamphlet on EA (CPRE, 1990).

Practitioners have also been assisted through the provision of EA training courses. The Local Government Training Board held a short course for local authority planners, soon after the implementation of the Directive. Several local authorities have held one day, or longer, seminars on EA for their officers. The Department of Transport has held several training courses for trunk road managers and their consultants, on a regional basis, dealing with EA. Similarly, the Nature Conservancy Council and Her Majesty's Inspectorate of Pollution have organised several training courses for their officers dealing with EA cases. DOE (Northern Ireland) Planning Service ran a series of workshops for all staff involved with EA. The EC training initiative on EIA, through the EIA Centre at the University of Manchester, has supported EA training and encouraged the dissemination of EA information. Several masters degree/diploma courses, specifically concerned with EIA, are now also available in the UK, as well as courses where EIA is a component of a specialist degree scheme. Seminars and conferences of a more wide ranging nature, relating to EA are also held in the UK. These are organised by various bodies, such as universities, consultancies, and professional organisations (Wathern, 1991).

The quantity of EIA training in the UK has increased considerably since Directive 85/337 was approved. However, there is still scope for improving the quality and practical relevance of certain of the training provided (Wood and Lee, 1991).

(g) Effect on timescale, costs, etc.

The majority of EA practitioners consulted in the UK (including public and private developers, consultants, designated environmental authorities and competent authorities) consider that EA for planning cases has, in general, resulted in only a minor, or no, increase in the overall costs of a project (Wood and Jones, 1991). It is also considered that EA has had very little overall effect on the timescale; in some instances the timescale may even have been shortened (Wood and Jones, 1991). A slight cost increase associated with the production of the ES has been noted for schemes under the highways regulations. There appears to be little or no delay for power station and overhead line projects, except where further information is requested and some elements of delay and additional cost then become apparent. The requirement for EA and the attendant consultation process has caused some delays and additions to costs for some pipe-line projects, and some land drainage schemes. In certain circumstances MAFF may provide grant aid towards the cost of preparing ESs. There is no information so far about the effects of EA procedures on costs and timescales for marine salmon farming projects, and harbour works, due to the limited number of applications being made. Overall, given the short time in which the EA regulations have been in force, they seem to have been implemented so far with little noticeable cost or disruption.

Generally, UK government departments appear to consider that the regulations to implement the EIA Directive are working well in practice, with EA providing useful information for the decision-making process. Some other participants in the EA process, whilst making a positive judgement overall, have some reservations, and cite, *inter alia*, insufficient understanding of EA and a lack of training as two obstacles to better performance.

## 5. OVERALL ASSESSMENT OF THE EFFECTIVENESS OF IMPLEMENTATION AND OF REMAINING DIFFICULTIES

(a) Provisions already made

A number, but not all, of respondents consider that the formal provisions made by the UK broadly implement the requirements of Directive 85/337/EEC. There are some remaining areas of uncertainty relating, for example, to the legal status and appropriateness of the indicative criteria and thresholds for Annex II projects and to the manner in which Article 5 and Annex III

have been transposed into UK regulations.

There were more reservations among respondents about EA implementation in practice in the UK. In part this is expected, given the relatively recent approval of EA regulations. Nonetheless, there are a number of areas of concern which may need to be addressed. These include:

- inadequate monitoring of the Directive's implementation in the UK, especially in the case of projects covered by 'non-planning' regulations;
- failure to start the EA process sufficiently early and to include an adequate treatment of alternatives;
- insufficient use of systematic scoping procedures and methods;
- poor quality and insufficiently objective ESs being submitted by developers and accepted by competent authorities;
- uncertain use made of ESs and consultation findings in the decision process;
- insufficient provisions for monitoring the environmental impacts arising from project implementation and for monitoring their consistency with predictions contained in the ES.

**(b) <u>Ambiguities in the Directive</u>**

There have been some specific problems of interpreting the meaning of particular projects in Annexes I and II, e.g. 'integrated chemical installations' and 'urban development projects', and some respondents are unclear how to interpret 'significant effects on the environment'. However, on the whole, those consulted have not experienced major problems in interpreting the provisions of the Directive, nor do they consider there have been major technical and procedural difficulties in transposing it into the UK situation.

**(e) Recommendations for more satisfactory, cost-effective compliance in the United Kingdom**

The following specific suggestions have been made to achieve more satisfactory practical compliance with Directive 85/337 in the UK. They originate from the organisations and individuals consulted and from other, recently completed, reviews of EA implementation in the UK which also contain more detailed recommendations (Wood and Jones, 1991; Jones, Lee and Wood, 1991).

- A system for centrally recording all ESs prepared under UK regulations should be established and the list of all such ESs should be published at regular intervals. An official central depository for all ESs should be established at which the ESs should be available for public consultation.

- Measures should be taken to ensure that the EA process starts sufficiently early and that its effectiveness during the early stages is strengthened by placing greater emphasis on early consultation and more systematic scoping of the assessment.

- More specific guidance should be issued to reduce any ambiguity in the interpretation of the indicative criteria and thresholds for Annex II projects; the application of these criteria and thresholds should be monitored, on a sample basis, to ensure satisfactory compliance.

- Measures should be taken to improve the quality and objectivity of ESs, including the provision of guidance for the preparation and evaluation of ESs.

- Guidance should be provided on the role of the public and voluntary groups in the EA process.

- Consideration should be given to the establishment of an independent statutory body to

set and maintain standards relating to scoping, the determination of significant impacts, review of ESs and monitoring/post-auditing.

- More, and better targeted, training should be provided for those engaged in the EA process.

- More research should be undertaken of: the actual use made of the ES and consultation findings in the authorization of projects and of means of increasing their effectiveness; the costs, time and other resources associated with EA implementation in order to provide guidance on its cost-effective development.

## REFERENCES


Council for the Protection of Rural England (1990) Environmental Statements: Getting them right CPRE, London.

Countryside Commission (1991) Environmental Assessment: The Treatment of Landscape and Countryside Recreation Issues Technical Report, CCP 326, Countryside Commission Publications, Cheltenham.

Crown Estate Office (1988) Environmental Assessment of Marine Salmon Farms dated 15 July 1988, CEO, Edinburgh.

Department of the Environment (Northern Ireland) (1989) Environmental Impact Assessment Development Control Advice Note 10, DOE (NI), Belfast.

Department of the Environment/Welsh Office (1988) Environmental Assessment DOE Circular 15/88 (Welsh Office 23/88), dated 12 July 1988, HMSO, London.

Department of the Environment/Welsh Office (1989) Environmental Assessment: A Guide to the Procedures HMSO, London.

Department of Transport (1983) Manual of Environmental Appraisal Assessments Policy and Methods Division, DTp, London.

Department of Transport (1989) Environmental Assessment under EC Directive 85/337 DTp Departmental Standard notice HD18/88, dated July 1989, DTp, London.

Forestry Commission (1988) Environmental Assessment of Afforestation Projects dated 4 August 1988, Forestry Commission, Edinburgh.

Jones, C.E., Lee, N. and Wood, C. (1991) UK Environmental Statements 1988-1990: an Analysis Occasional Paper 29, Department of Planning and Landscape, University of Manchester, Manchester.

Lambert, A.J. and Wood, C.M. (1990) 'UK implementation of the European Directive on EIA: spirit or letter?' Town Planning Review 61 (3): 247-262.

Lee, N. (1991) 'Quality control in environmental assessment' Proceedings of Advances in Environmental Assessment Conference. Legal Studies and Services, London, and Institute of Environmental Assessment, Grantham.

Lee, N. and Colley, R. (1990) Reviewing the Quality of Environmental Statements Occasional Paper 24, Department of Planning and Landscape, University of Manchester, Manchester.

Scottish Development Department (1986) Scottish Traffic and Environmental Appraisal Manual (STEAM) SDD, Edinburgh.

Scottish Development Department (1988) Environmental Assessment: Implementation of EC Directive: The Environmental Assessment (Scotland) Regulations 1988 SDD Circular 13/88, dated 12 July 1988, SDD, Edinburgh.

Smith, J. (1990) A Critical Appraisal of the Performance of the Environmental Assessment (Scotland) Regulations since their Introduction Unpublished M.Sc. Environmental Management, Stirling University, Stirling.

Wathern, P. (1991) EIA Training in the UK. In Wood, C. Lee, N. (eds.) Environmental Impact Assessment Training and Research in the European Communities Occasional Paper 27, Department of Planning and Landscape, University of Manchester, Manchester.

Wood, C. and Jones, C. (1991) Monitoring Environmental Assessment and Planning A report by the EIA Centre, Department of Planning and Landscape, University of Manchester for the Department of the Environment. HMSO, London.

Wood, C.M. and Lee, N. (eds.) (1991) Environmental Impact Assessment Training and Research in the European Communities Occasional Paper 27, Department of Planning and Landscape, University of Manchester, Manchester.

## APPENDIX

### UK EA regulations (as at beginning of July 1991)

- Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (SI No. 1199)

- Environmental Assessment (Scotland) Regulations 1988 (SI No. 1221)

- Environmental Assessment (Salmon Farming in Marine Waters) Regulations 1988 (SI No. 1218)

- Environmental Assessment (Afforestation) Regulations 1988 (SI No. 1207)

- Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988 (SI No. 1217)

- Highways (Assessment of Environmental Effects) Regulations 1988 (SI No. 1241)

- Harbour Works (Assessment of Environmental Effects) Regulations 1988 (SI No. 1336)

- Town and Country Planning General Development Order 1988 (SI No. 1813)
[revokes Town and Country Planning General Development (Amendment) Order 1988 (SI No. 1272) - provisions of this Regulation are now contained in Article 14(2) of SI No. 1813]]

- Town and Country Planning (General Development) (Scotland) Amendment Order 1988 (SI No. 977)

- Town and Country Planning (General Development) (Scotland) Amendment No. 2 Order 1988 (SI No. 1249)

- Harbour Works (Assessment of Environmental Effects) (No. 2) Regulations 1989 (SI No. 424)

- The Town and Country Planning (Assessment of Environmental Effects) (Amendment) Regulations 1990 (SI No. 367)

- The Electricity and Pipe-line Works (Assessment of Environmental Effects) Regulations 1990 (SI No. 442)
[revokes The Electricity and Pipe-line Works (Assessment of Environmental Effects) Regulations 1989 (SI No. 167)]

- The Roads (Assessment of Environmental Effects) Regulations (Northern Ireland) 1988 (SR No. 344)

- The Planning (Assessment of Environmental Effects) Regulations (Northern Ireland) 1989 (SR No. 20)

- The Environmental Assessment (Afforestation) Regulations (Northern Ireland) 1989 (SR No. 226)

- The Harbour Works (Assessment of Environmental Effects) Regulations (Northern Ireland) 1990 (SR No. 181)

**Other guidance materials**

DOE Circular 24/88 (Welsh Office 48/88) Environmental Assessment of Projects in Simplified Planning Zones and Enterprise Zones dated 25 November 1988.

Scottish Development Department Circular 26/88 Environmental Assessment of Projects in Simplified Planning Zones and Enterprise Zones (relates to Scotland) dated 25 November 1988.

DOE Memorandum of 30 March 1989 to the General Mangers of New Towns Development Corporations and to the Chief Executive of the Commission for the New Towns on Environmental Assessment (advice on projects arising in new towns).

DOE free leaflet Environmental Assessment

Welsh Office free leaflet Environmental Assessment / Asesu'r Amgylchedd (bilingual).

Scottish Office free leaflet Environmental Assessment - a Guide.

**EIA REGULATORY DEVELOPMENTS JULY 1991 - MARCH 1992**

- The Drainage (Environmental Assessment) Regulations (Northern Ireland). 15 August 1991.

## APPENDIX

### Checklist of questions considered in preparing a Member State annex

1. The extent of formal compliance by the Member State concerned with the requirements of Directive 85/337/EEC

   a) What are the principal legal provisions enacted by the Member State concerned to implement Directive 85/337/EEC?

   b) What, if any, are the principal deficiencies in formal compliance with Directive 85/337/EEC in the Member State concerned?

   c) What are the principal reasons for any deficiencies in formal compliance and for delays in achieving full compliance?

   d) What measures are in the process of being implemented, or are envisaged, to remedy any remaining deficiencies in the implementation of Directive 85/337/EEC in the Member State concerned?

   e) Which are the competent authority or authorities that have been designated for performing duties arising from the Directive, and what are their usual functions and responsibilities? Are authorities designated in general terms, or are they designated for each request for consent?

2. The criteria and/or thresholds adopted by the Member State concerned for the selection of Annex II projects to be subject to assessment

   a) Have criteria and/or thresholds been established and, if so, what are their principal characteristics and their legal status?

   b) In your judgement, and to the best of your knowledge:

      - are these criteria and/or thresholds sufficiently clear and are they at approximately the right level or are they too strict or too lax?

      - are they similar to, or very different from those being applied in other Member States?

3. The nature and extent of practical compliance with Directive 85/337/EEC in the Member State concerned

The main purpose of section 3. is to establish the extent to which Directive 85/337/EEC has been implemented in practice in the Member State concerned.

   a) Approximately how many environmental assessments are being carried out in the

Member State concerned each year and what are the principal project categories within which most of these assessments take place?

b) Are developers satisfactorily providing, in their environmental assessment documents (EISs) the information specified in Article 5 and Annex III of the Directive? Do alternatives to the submitted project have to be taken into account?

c) Are authorities with relevant information in their possession making this information available to the developer (see Article 5(3))

d) How satisfactorily are arrangements working in practice for the publication of the EIS (see Article 6)?

e) How satisfactorily are arrangements working in practice regarding consultation and public participation (see Article 6)?

f) How satisfactorily are the Directive's provisions relating to the assessment of transborder impacts being implemented in practice (see Article 7)?

g) How well are the arrangements being implemented, in practice, to take account of the EIS and consultations based on it within project authorization procedures and to inform the public about the resulting decision (see Articles 8 and 9)?

h) To what extent, if any, are projects being modified as a result of undertaking an EIA? To what extent have decisions made concerning the authorization of projects been influenced by EIA?

4. Specific aspects of the Directive's translation into legislation and practice in the Member State concerned

The main purpose of section 4. is to establish how well Directive 85/337/EEC is working n practice in the Member State concerned.

a) What formal measures has the Member State concerned undertaken to monitor the implementation of Directive 85/337/EEC within its country?

b) What provision, mandatory or non-mandatory, has been made for 'scoping' an assessment (i.e. determining the appropriate coverage of an assessment) in the Member State concerned? Are such provisions and practices working satisfactorily?

c) What proportion of the EISs being produced are, in your judgement, of satisfactory quality? What are the main kinds of deficiency that have been experienced and what are the main causes of these deficiencies?

d) Has the Member State concerned made legal provision for the formal review of the adequacy and quality of EISs (e.g. by establishing review bodies and review criteria)? If not, has it provided non-mandatory, written advice and guidance on this? How well are these working in practice?

e) Has the Member State concerned made legal provision for monitoring the environmental impacts of projects after their implementation, and for post-auditing EIA studies? If not, has it provided non-mandatory, written advice and guidance on this? How well are these arrangements working in practice?

f) To what extent, in your judgement, has the Member State concerned (both through governmental and non-governmental organisations) provided satisfactory assistance in implementing EIA to practitioners (e.g. through circulars, guides, manuals, etc.,) and through training programmes? Brief details of the types of provisions that have been made would be helpful as well as an indication of the main deficiencies.

g) Is there any indication that the costs or timescale of projects are being affected (whether increased or decreased) as a result of undertaking an EIA?

5. Overall assessment of the effectiveness of the Directive's implementation in the Member State concerned, and of difficulties in its implementation

a) To what extent, in your view, are the legal provisions already made by the Member State concerned:

- in partial or total compliance with Directive 85/337,
- being implemented in practice (i.e. are there discrepancies between formal and practical compliance)?

b) Which provisions of the Directive, has the Member State concerned found to be ambiguous, or have caused difficulties in implementation?

c) What measures would you recommend be considered to facilitate more satisfactory formal or practical compliance in the Member State concerned, by cost-effective means.