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PREFACE TO EU GUIDANCE ON EIA

Environmental Impact Assessment (EIA) is a key instrument of European Union environmental policy. Since passage of the first EIA Directive in 1985 (Directive 85/337/EEC) both the law and the practice of EIA have evolved. An amending Directive was published in 1997 (Directive 97/11/EC) and the European Commission is now pleased to publish three guidance documents reflecting current EU legislation and the current state of good practice. These documents concern three specific stages in the EIA process:

- Screening
- Scoping
- EIS Review.

The aim of the guidance is to provide practical help to those involved in these stages in the EIA process, drawing upon experience from around Europe and worldwide. By following the Screening and Scoping Guidance it is hoped that better decisions will be made on the need for EIA and on the terms of reference for the studies that are required, thus starting the EIA process off on a better footing. The EIS Review guidance aims to help developers and their consultants prepare better quality Environmental Impact Statements and competent authorities and other interested parties to review them more effectively, so that the best possible information is made available for decision making.

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

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

The guidance has been prepared by Environmental Resources Management (ERM) under a research contract with the Directorate General for Environment of the European Commission. Those who participated in the study are listed overleaf.

Key terms used in the guidance are explained in a Glossary.

Copies of the guidance documents can be requested from Directorate General Environment of the European Commission at http://europa.eu.int/comm/ environment/eia/eia-support.htm

GLOSSARY OF TERMS

Term	Explanation
Accession Countries	Countries which are seeking to become Members States of the European Union.
Competent Authority (CA)	Those which the Member States designate as responsible for performing the duties arising from the Directive.
Developer	The applicant for authorisation for a private Project or the public authority which initiates a Project.
Development Consent	The decision of the Competent Authority or Authorities which entitles the Developer to proceed with the Project.
Effect/Impact	Any change in the physical, natural or cultural environment brought about by a development Project. Effect and Impact are used interchangeably.
EIA Team	The team which carries out the Environmental Studies and prepares the Environmental information for submission to the Competent Authority
Environmental Impact Assessment (EIA)	A term used in this document to describe the procedure which fulfils the assessment requirements of Directive 97/11/EC.
Environmental Impact Statement (EIS)	In many but not all EIA Regimes, the Environmental Information provided by the Developer to the Competent Authority is presented in the form of an Environmental Impact Statement. This is a document or documents containing the Environmental Information required under Article 5 of Directive 85/337/EEC as amended by Directive 97/11/EC. The abbreviation EIS is used in the guidance to cover both Environmental Impact Statements and other formats in which environmental information is provided.
Environmental Information	The information provided by a Developer to a Competent Authority on *inter alia* the Project and its environmental effects. The requirements for this information are set out in Article 5 and Annex IV of the Directive (see Environmental Impact Assessment).
Environmental Studies	The surveys and investigations carried out by the Developer and the EIA Team in order to prepare the Environmental Information for submission to the Competent Authority.
Exclusion List	A list of thresholds and criteria for specified categories of projects defining those projects for which EIA is not required because they are considered to be unlikely to have significant effects on the environment. An exclusive list may be over-ridden by other requirements e.g. that EIA is required for projects in certain locations.
Impact	see Effect.
Mandatory List	A list of thresholds and criteria for specified categories of projects defining those projects for which EIA is always required because they are considered to be likely to have significant effects on the environment.
Negative list	See Exclusion List
Positive List	See Mandatory List
Project	The execution of construction works or of other installations or schemes and other interventions in the natural surroundings and landscape including those involving the extraction of mineral resources.
Review	The process of establishing whether an EIS is adequate for the Competent Authority to use it to inform the decision on Development Consent. It is important to note that the decision will usually involve consideration of other information in addition to the environmental information, but the aim of review is to check that the environmental information is adequate.
Screening	The process by which a decision is taken on whether or not EIA is required for a particular Project.
Scoping	The process of identifying the content and extent of the Environmental Information to be submitted to the Competent Authority under the EIA procedure.

FOREWORD TO THE GUIDANCE ON EIS REVIEW

This guidance document is about Reviewing Environmental Impact Statements (EIS). It is one of a series of three guidance documents on EIA published by the Commission. The others are concerned with Screening in EIA and Scoping in EIA.

Review is the process of establishing whether the environmental information submitted by a developer to a competent authority, as part of an EIA procedure, is adequate to inform the decision on development consent. In many Member States this information is presented in the form of an Environmental Impact Statement or EIS and we use the term EIS throughout this document for brevity. This document is not intended to be used to verify whether EIS meet legal requirements as this is only possible by reference to individual Member States' legislation but it is intended to reflect the requirements of the EU directives and current good practice in EIA.

The document comprises two parts (A and B) and refers to a supporting checklist and appendix.

- Part A of the guidance document describes the requirements of the European Council (EC) Directives on EIA (85/337/EEC as amended by 97/11/EC) and the role of review in EIA procedures. Part A should **always** be read in conjunction with the EU Directives on EIA and Member State legislation and guidance on EIA, as detailed legal requirements vary throughout the Member States.

- Part B of the guidance offers practical advice on reviewing EIS and introduces a checklist designed for this purpose.

Key terms used in the guidance are explained in the Glossary.

Further copies of this guidance document can be requested from the Directorate General Environment of the European Commission (*contact http://www.euuropa.eu.int/ comm/environment/eia/eia-support.htm).*

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

PART A   REVIEW IN ENVIRONMENTAL IMPACT ASSESSMENT

A1 Environmental Impact Assessment (EIA)

EIA is a procedure required under the terms of Directive 97/11/EC amending Directive 85/337/EEC on assessment of the effects of certain public and private projects on the environment. Article 2 requires that *"Member States shall adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects."*
Article 8 then requires that *"The results of consultations and information gathered pursuant to* [the EIA procedure] *must be taken into consideration in the development consent procedure"*.

These requirements are elaborated further in the Directive and in the EIA systems introduced in each Member State. These vary in their details but the practical stages in most EIA systems are generally those illustrated in Figure 1. The highlighted steps in Figure 1 are mandatory under the terms of the Directive. Other steps, including the formal review of environmental information before it is used for decision-making, are part of good practice in EIA, and have been adopted in some Member States but not all.

A2 The Information Requirements of Directives 85/337/EEC and 97/11/EC

The environmental information that developers are required to provide under the EIA procedure is defined in Article 5(3) and Annex IV of Directive 97/11/EC. Article 5(3) requires that the information must include "*at least*

- *a description of the project comprising information on the site, design and size of the project,*
- *a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects,*
- *the data required to identify and assess the main effects which the project is likely to have on the environment,*
- *an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects,*
- *a non-technical summary of the information mentioned in the previous indents"*.

Annex IV is presented in Appendix A of this document and provides further detail on the information which may be required.

Article 5(1) provides that the developers must supply the information in Annex IV "*in an appropriate form…. in so much as*:

> *(a) the Member States consider that the information is relevant to a given stage of the consent procedure and to the specific characteristics of a particular project or type of project and of the environmental features likely to be affected;*

Figure 1 The Environmental Impact Assessment (EIA) Process

KEY STAGES	NOTES
Project Preparation	The developer prepares the proposals for the project
Notification to Competent Authority	In some MS there is a requirement for the developer to notify the CA in advance of the application for development consent. The developer may also do this voluntarily and informally
Screening	The CA makes a decision on whether EIA is required. This may happen when the CA receives notification of the intention to make a development consent application, or the developer may make an application for a Screening Opinion. The Screening decision must be recorded and made public. (See the guidance on Screening in EIA) (Article 4).
Scoping	The Directive provides that developers may request a Scoping Opinion from the CA. The Scoping Opinion will identify the matters to be covered in the environmental information. It may also cover other aspects of the EIA process (see the guidance on Scoping in EIA). In preparing the opinion the CA must consult the environmental authorities (Article 5(2)). In some MS Scoping is mandatory
Environmental Studies	The developer carries out studies to collect and prepare the environmental information required by Article 5 of the Directive (see Appendix A).
Submission of Environmental Information to Competent Authority	The developer submits the environmental information to the CA together with the application for development consent. If an application for an Annex I or II project is made without environmental information the CA must screen the project to determine whether EIA is required (see above). (Articles 5(1) and 5(3)). In most MS the environmental information is presented in the form of an Environmental Impact Statement (EIS).
Review of Adequacy of the Environmental Information	In some MS there is a formal requirement for independent review of the adequacy of the environmental information before it is considered by the CA. In other MS the CA is responsible for determining whether the Information is adequate. The guidance on EIS Review is designed to assist at this stage. The developer may be required to provide further information if the submitted information is deemed to be inadequate.
Consultation with Statutory Environmental Authorities, Other Interested Parties and the Public	The environmental information must be made available to authorities with environmental responsibilities and to other interested organisations and the general public for review. They must be given an opportunity to comment on the project and its environmental effects before a decision is made on development consent. If transboundary effects are likely to be significant other affected MS must be consulted (Articles 6 and 7).
Consideration of the Environmental Information by the Competent Authority before making Development Consent Decision	The environmental information and the results of consultations must be considered by the CA in reaching its decision on the application for development consent (Article 8).
Announcement of Decision	The decision must be made available to the public including the reasons for it and a description of the measures that will be required to mitigate adverse environmental effects (Article 9).
Post-Decision Monitoring if Project is Granted Consent	There may be a requirement to monitor the effects of the project once it is implemented.

The highlighted steps must be followed in all Member States under Directives 85/337/EC and 97/11/EC. Scoping is not mandatory under the Directive but Member States must establish a voluntary procedure by which developers can request a Scoping Opinion from the CA if they wish.   The steps which are not highlighted form part of good practice in EIA and have been formalised in some Member States but not in all. Consultations with environmental authorities and other interested parties may be required during some of these additional steps in some Member States.
Abbreviations   CA = Competent Authority;   MS = Member State.

(b) the Member States consider that a developer may reasonably be required to compile this information having regard inter alia to current knowledge and methods of assessment."

In most Member States, although not all, the information is provided in the form of an Environmental Impact Statement or EIS and in the rest of this guide we use the term EIS to refer to the environmental information required by the Directives.

A3   Implementation of Review in the EU

In some Member States review of the adequacy of EIS before they are used for decision-making is a mandatory stage in the EIA procedure. In these cases the review may be undertaken by the competent authority or by an independent organisation on behalf of the competent authority. Where the EIS is considered to be inadequate, the developer will be asked to provide additional information and the development consent decision process will not start until this information has been provided. There will usually be a procedure for appeal against requests for further information.

In other Member States there is no formal stage of review in the EIA procedure but competent authorities will usually undertake some sort of review before starting the decision-making process, to ensure that the requirements of the legislation have been met. They will then usually have the power to ask for further information from developers before the decision-making process starts, if they consider the EIS to be inadequate. Review may also be undertaken informally by the developer prior to submitting the EIS to the competent authority or by consultees after it is submitted, to check that the information is adequate.

Various professional bodies, for example the Institute of Environmental Management and Assessment in the United Kingdom (http://www.iem.org.uk) and EIA research institutions (see http://europa.eu.int/comm/environment/eia/contacts2.htm for a list of EIA Centres) will provide EIS review as a service to competent authorities, developers and other parties if required.

An overview of Member State requirements for review as they were in August 1999 can be found in a report at *http://europa.eu.int/comm/environment/eia/eia-studies-and-reports/study1.htm*.

PART B   PRACTICAL GUIDANCE ON REVIEW

B1 Introduction

This part of the document gives practical guidance on Review of EIS.

B2 Use of the Guidance

The guidance is designed for use by various participants in the EIA process.

Competent Authorities

Competent authorities will typically undertake some sort of review of EIS before using the information for decision-making. This may be a formal review required by law or an informal review. Competent authorities will sometimes commission outside organisations such a research or professional bodies to undertake reviews on their behalf (see below).

When a competent authority reviews an EIS and finds it inadequate it will usually have powers to require further information to be submitted by the developer.

Independent Review Bodies

In some EIA regimes independent bodies have been set up to review environmental information submitted under EIA procedures and to advise competent authorities on the adequacy of the information before it is used for decision-making. As noted above research institutes and professional bodies may also be asked to undertake reviews by competent authorities.

Developers and EIA Teams

Before submitting an EIS many developers find it helpful to undertake a review to check the information is likely to be adequate. Clearly this review cannot guarantee that the competent authority will not disagree but it should increase developers' confidence that delays will not be caused by requests for further information. Like competent authorities they may do this themselves or ask the EIA Team, or they may commission an external reviewer.

Consultees

Some consultees who have significant interests in particular projects may also undertake reviews on their own behalf to ensure themselves that their interests have been adequately addressed in the EIS and that it forms a sound basis for decision-making.

There are a number of tools which have been developed for review around Europe and further afield. These all use some form of checklist and this guidance adopts the same approach. The EIS Review Checklist presented at the end of this section has been developed by reference to the Directive and the requirements of Article 5 and Annex IV. Reference has also been made to other review checklists and to guidance and research literature from many different sources on what constitutes a good Environmental Impact Statement.

The checklist is designed as a method for reviewing the adequacy of the EIS in terms of compliance with the requirements of the Directive and generally accepted good practice in EIA. By adequacy is meant the completeness and suitability of the information from a content and decision-making viewpoint. In particular it is aimed at helping reviewers decide whether the information meets the two main objectives of:

- providing decision-makers with all the necessary environmental information for their decision;
- communicating effectively with consultees and the general public so that they can comment in a useful manner on the project and its environmental impacts.

It is important to appreciate that the checklist cannot verify whether the information meets legal requirements. This can only be done by reference to specific Member State legislation.

It is also not able to verify the technical or scientific quality of the information or the adequacy of the environmental studies that have gone into its preparation. If reviewers are concerned about the technical adequacy of the studies or the information advice should be sought from relevant experts.

The EIS Review Checklist is designed to be used in one of two ways.

- Either to assess the adequacy of an EIS for decision making in which case the output of the checklist is an assessment that the information is either adequate or inadequate. If the information is inadequate the checklist prompts the user to identify what further information is required.

- Or to assess the quality of EIS generally for either research or monitoring purposes. So for example the checklist can be used to investigate which parts of the information required by the Directive are usually best or worst in quality across a number of EIS, or to investigate the overall quality of EIS submitted for different types of projects, or to investigate trends in quality over time.

B3 An Overview

The checklist provides quite a lengthy list of questions to be asked about EIS. It is important, however, to emphasise that the main aim of an EIS to provide good information for two audiences - decision makers and people potentially affected by a project. The most important thing is therefore, that it should communicate effectively with these audiences. The summary below distils from the checklist the main characteristics which a good EIS should have to meet this objective.

The Qualities of a Good EIS
- A clear structure with a logical sequence for example, describing, existing baseline conditions, predicted impacts (nature, extent and magnitude), scope for mitigation, agreed mitigation measures, significance of unavoidable/residual impacts for each environmental topic.
- A table of contents at the beginning of the document.
- A clear description of the development consent procedure and how EIA fits within it.
- Reads as a single document with appropriate cross-referencing.
- Is concise, comprehensive and objective.
- Is written in an impartial manner without bias.
- Includes a full description of the development proposals.
- Makes effective use of diagrams, illustrations, photographs and other graphics to support the text.
- Uses consistent terminology with a glossary.
- References all information sources used.
- Has a clear explanation of complex issues.
- Contains a good description of the methods used for the studies of each environmental topic.
- Covers each environmental topic in a way which is proportionate to its importance.
- Provides evidence of good consultations.
- Includes a clear discussion of alternatives.
- Makes a commitment to mitigation (with a programme) and to monitoring.
- Has a Non Technical Summary which does not contain technical jargon.

EIS REVIEW CHECKLIST

Introduction

This checklist is designed for users who wish to review the quality of EIS (that is, the environmental information provided by developers) to check their adequacy for decision-making and consultation.

Two sets of instructions for using the checklist are provided.

- Firstly for users wishing to review a single EIS to determine whether the information is adequate for decision making and consultation and if not, what more information is needed

- Secondly for users wishing to review several EIS and grade them for comparative research or monitoring purposes.

Both methods use the same checklist. It is organised in seven sections:

- Description of the project
- Alternatives
- Description of the environment likely to be affected by the project
- Description of the likely significant effects of the project
- Description of Mitigating Measures
- Non Technical Summary
- Quality of presentation

Within each section there are numbered Review Questions. For some questions notes are provided to assist the reviewer.

Instructions for Reviewing a Single EIS

Step 1

Briefly overview the EIS to understand how it is organised and where to find things within it.

Step 2

Decide for each Review Question, whether the question is relevant to the specific project. If so enter "Yes" in Column 2. At the end of each section of the checklist consider whether there are any special features of the project that mean that types of information not identified in the Checklist could be relevant and add these to the Checklist in the spaces provided.

Step 3

If a Review Question is identified as relevant, review the EIS in more detail and decide whether the particular information identified in the question is provided and is sufficient for decision-making. If it is complete enter "Yes" in Column 3. If it is not enter "No".

In considering whether the information is sufficient for decision-making the reviewer should consider whether there are any omissions in the information and if there are whether these omissions are vital to the decision-making process. If they are not then it may be unnecessary to request further information. This will avoid unnecessary delay to the process. Factors to consider will include:

- The legal provisions applying and the factors which the decision maker is required to take into account at this stage in the consent process for the project.
- Whether the consent process at the EIA stage is about the principle of the project or the detailed design.
- Whether there are later consents still required which will examine relevant environmental issues in more detail, for example pollution control consents such as IPPC.
- The scale and complexity of the project and the sensitivity of the receiving environment.
- Whether the environmental issues raised by the project are high profile.
- The views of the public and consultees about the project and the degree of controversy.

Step 4

If the answer to a review Question is "No" consider what further information is required and note this in Column 4. The reviewer may also wish to make any suggestions on where or how the information could be obtained.

Instruction for Comparative and Monitoring Review

The checklist can also be used for more comparative appraisal of EIS. Reviewers may wish to compare the quality of EIS across a number of similar projects or between different project types, or look at trends in quality over time, or to investigate how well different parts of EIS are handled.

The steps in the process are the same as those described above except Step 3.

Step 3

When appraising quality across projects instead of entering either "Yes" or "No"." in Column 3 the reviewer can use a grading system. A suggested system is outlined below but users are free to use any system that suits their purpose.

A: Full provision of information with no gaps or weaknesses
B: Good provision of information with only very minor weaknesses which are not of importance to the decision
C: Adequate provision of information with any gaps or weaknesses in information not being vital to the decision process
D: Weak provision of information with gaps and weaknesses which will hinder the decision process but require only minor work to complete
E: Very Poor provision of information with major gaps or weaknesses which would prevent the decision process proceeding and require major work to complete.

The appraisal can be completed with a final step to provide an overall grade for the EIS. A final section is provided in the checklist for this purpose. The reviewer grades the

quality of information in each section of the checklist by aggregating the grades for the individual Review Questions and aggregates these to provide an overall grading.

Aggregation will require judgement; so for example if one section has ten Review Questions and nine are graded B and one A, then a B grade overall is probably reasonable. If nine are graded B and one E, then an overall D grade is probably appropriate as overall the information is still inadequate.

The Review Checklist

	SECTION 1 DESCRIPTION OF THE PROJECT			
No.	**Review Question**	**Relevant?**	**Adequately Addressed?**	**What further information is needed?**
The Objectives and Physical Characteristics of the Project				
1.1	Are the need for and objectives of the project explained?			
1.2	Is the programme for implementation of the Project described, detailing the estimated length of time and start and Finnish dates for construction, operation and decommissioning? (this should include any phases of different activity within the main phases of the Project, for example extraction phases for mining operations)			
1.3	Are all the main components of the project described (for assistance see the Checklist of Project Activities in Part C of the Scoping Guide in this series)			
1.4	Is the location of each Project component identified, using maps, plans and diagrams as necessary?			
1.5	Is the layout of the site (or sites) occupied by the project described? (including ground levels, buildings, other physical structures, underground works, coastal works, storage facilities, water features, planting, access corridors, boundaries)			
1.6	For linear projects, are the route corridor, the vertical and horizontal alignment and any tunnelling and earthworks described?			
1.7	Are the activities involved in construction of the project all described?			
1.8	Are the activities involved in operation of the project all described?			
1.9	Are the activities involved in decommissioning the project all described? (e.g. closure, dismantling, demolition, clearance, site restoration, site re-use etc)			
1.10	Are any additional services required for the project all described? (e.g. transport access, water, sewerage, waste disposal, electricity, telecoms) or developments (e.g. roads, harbours, powerlines, pipelines)			
1.11	Are any developments likely to occur as a consequence of the Project identified? (e.g. new housing, roads, water or sewerage infrastructure, aggregate extraction)			
1.12	Are any existing activities which will alter or cease as a consequence of the Project identified?			
1.13	Are any other existing or planned developments with which the Project could have cumulative effects identified?			
The Size of the Project				
1.14	Is the area of land occupied by each of the permanent project components quantified and shown on a scaled map? (including any associated access arrangements, landscaping and ancillary facilities)			
1.15	Is the area of land required temporarily for construction quantified and mapped?			

SECTION 1   DESCRIPTION OF THE PROJECT

No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
1.16	Is the reinstatement and after use of land occupied temporarily for operation of the Project described? (e.g. land used for mining or quarrying)			
1.17	Is the size of any structures or other works developed as part of the Project identified? (e.g. the floor area and height of buildings, the size of excavations, the area or height of planting, the height of structures such as embankments, bridges of chimneys, the flow or depth of water)			
1.18	Is the form and appearance of any structures or other works developed as part of the Project described? (e.g. the type, finish and colour of materials, the architectural design of buildings and structures, plant species, ground surfaces, etc)			
1.19	For urban or similar development projects, are the numbers and other characteristics of new populations or business communities described?			
1.20	For projects involving the displacement of people or businesses, are the numbers and other characteristics of those displaced described?			
1.21	For new transport infrastructure or projects generating substantial traffic flows, is the type, volume, temporal pattern and geographical distribution of new traffic generated or diverted as a consequence of the Project described?			
Production Processes and Resources Used				
1.22	Are all the processes involved in operating the Project described? (e.g. manufacturing or engineering processes, primary raw material production, agricultural or forestry production methods, extraction processes)			
1,23	Are the types and quantities of outputs produced by the Project described? (these could be primary or manufactured products, goods such as power or water or services such as homes, transport, retailing, recreation, education, municipal services (water, waste, etc))			
1.24	Are the types and quantities of raw materials and energy needed for construction and operation discussed?			
1.25	Are the environmental implications of the sourcing of raw materials discussed?			
1.26	Is efficiency in use of energy and raw materials discussed?			
1.27	Are any hazardous materials used, stored, handled or produced by the Project identified and quantified? • during construction • during operation • during decommissioning			

SECTION 1 DESCRIPTION OF THE PROJECT

No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
1.28	Are the transport of raw materials to the Project and the number of traffic movements involved discussed? (including road, rail and sea transport) • during construction • during operation • during decommissioning			
1.29	Is employment created or lost as a result of the Project discussed? • during construction • during operation • during decommissioning			
1.30	Are the access arrangements and the number of traffic movements involved in bringing workers and visitors to the Project estimated? • during construction • during operation • during decommissioning			
1.32	Is the housing and provision of services for any temporary or permanent employees for the Project discussed? (relevant for Projects requiring migration of a substantial new workforce into the area for either construction or the long term)			
Residues and Emissions				
1.33	Are the types and quantities of solid waste generated by the Project identified? (including construction or demolition wastes, surplus spoil, process wastes, by-products, surplus or reject products, hazardous wastes, household or commercial wastes, agricultural or forestry wastes, site clean-up wastes, mining wastes, decommissioning wastes) • during construction • during operation • during decommissioning			
1.34	Are the composition and toxicity or other hazards of all solid wastes produced by the Project discussed?			
1.35	Are the methods for collecting, storing, treating, transporting and finally disposing of these solid wastes described?			
1.36	Are the locations for final disposal of all solid wastes discussed?			
1.37	Are the types and quantities of liquid effluents generated by the Project identified? (including site drainage and run-off, process wastes, cooling water, treated effluents, sewage) • during construction • during operation • during decommissioning			
1.38	Are the composition and toxicity or other hazards of all liquid effluents produced by the Project discussed?			
1.39	Are the methods for collecting, storing, treating, transporting and finally disposing of these liquid effluents described?			

	SECTION 1 DESCRIPTION OF THE PROJECT			
No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
1.40	Are the locations for final disposal of all liquid effluents discussed?			
1.41	Are the types and quantities of gaseous and particulate emissions generated by the Project identified? (including process emissions, fugitive emissions, emissions from combustion of fossil fuels in stationary and mobile plant, emissions from traffic, dust from materials handling, odours) • during construction • during operation • during decommissioning			
1.42	Are the composition and toxicity or other hazards of all emissions to air produce by the Project discussed?			
1.43	Are the methods for collecting, treating and finally discharging these emissions to air described?			
1.44	Are the locations for discharge of all emissions to air identified and the characteristics of the discharges identified? (e.g. height of stack, velocity and temperature of release)			
1.45	Is the potential for resource recovery from wastes and residues discussed? (including re-use, recycling or energy recovery from solid waste and liquid effluents)			
1.46	Are any sources of noise, heat, light or electromagnetic radiation from the Project identified and quantified? (including equipment, processes, construction works, traffic, lighting, etc)			
1.47	Are the methods for estimating the quantities and composition of all residues and emissions identified and any difficulties discussed?			
1.48	Is the uncertainty attached to estimates of residues and emissions discussed?			
Risks of Accidents and Hazards				
1.49	Are any risks associated with the Project discussed? • risks from handling of hazardous materials • risks from spills fire, explosion • risks of traffic accidents • risks from breakdown or failure of processes or facilities • risks from exposure of the Project to natural disasters (earthquake, flood, landslip, etc)			
1.50	Are measures to prevent and respond to accidents and abnormal events described? (preventive measures, training, contingency plans, emergency plans, etc)			
Other Questions on Description of the Project				

SECTION 2	CONSIDERATION OF ALTERNATIVES			
No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
2.1	Is the process by which the Project was developed described and are alternatives considered during this process described? (for assistance, see the guidance on types of alternatives which may be relevant in Part B3 of the Scoping Guide in this series)			
2.2	Is the baseline situation in the No Project situation described?			
2.3	Are the alternatives realistic and genuine alternatives to the Project?			
2.4	Are the main reasons for choice of the proposed Project explained, including any environmental reasons for the choice?			
2.5	Are the main environmental effects of the alternatives compared with those of the proposed Project?			
Other Questions on Consideration of Alternatives				

SECTION 3 — DESCRIPTION OF ENVIRONMENT LIKELY TO BE AFFECTED BY THE PROJECT

No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
Aspects of the Environment				
3.1	Are the existing land uses of the land to be occupied by the Project and the surrounding area described and are any people living on or using the land identified? (including residential, commercial, industrial, agricultural, recreational and amenity land uses and any buildings, structures or other property)			
3.2	Are the topography, geology and soils of the land to be occupied by the Project and the surrounding area described?			
3.3	Are any significant features of the topography or geology of the area described and are the conditions and use of soils described? (including soil quality stability and erosion, agricultural use and agricultural land quality)			
3.4	Are the fauna and flora and habitats of the land to be occupied by the Project and the surrounding area described and illustrated on appropriate maps?			
3.5	Are species populations and characteristics of habitats that may be affected by the Project described and are any designated or protected species or areas defined?			
3.6	Is the water environment of the area described? (including running and static surface waters, groundwaters, estuaries, coastal wasters and the sea and including run off and drainage. NB not relevant if water environment will not be affected by the Project)			
3.7	Are the hydrology, water quality and use of any water resources that may be affected by the Project described? (including use for water supply, fisheries, angling, bathing, amenity, navigation, effluent disposal)			
3.8	Are local climatic and meteorological conditions and existing air quality in the area described? (NB not relevant if the atmospheric environment will not be affected by the project)			
3.9	Is the existing noise climate described? (NB not relevant if acoustic environment will not be affected by the Project)			
3.10	Is the existing situation regarding light, heat and electromagnetic radiation described? (NB not relevant if these characteristics of the environment will not be affected by the Project)			
3.11	Are any material assets in the area that may be affected by the Project described? (including buildings, other structures, mineral resources, water resources)			
3.12	Are any locations or features of archaeological, historic, architectural or other community or cultural importance in the area that may be bisected the Project described, including any designated or protected sites?			
3.13	Is the landscape or townscape of the area that may be affected by the Project described, including any designated or protected landscapes and any important views or viewpoints?			

No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
SECTION 3	**DESCRIPTION OF ENVIRONMENT LIKELY TO BE AFFECTED BY THE PROJECT**			
3.14	Are demographic, social and socio-economic conditions (e.g. employment) in the area described?			
3.15	Are any future changes in any of the above aspects of the environment, that may occur in the absence of the project, described? (the so-called Moving Baseline or No Project situation)			
Data Collection and Survey Methods				
3.16	Has the study area been defined widely enough to include all the area likely to be significantly affected by the Project?			
3.17	Have all relevant national and local agencies been contacted to collect information on the baseline environment?			
3.18	Have sources of data and information on the existing environment been adequately referenced?			
3.19	Where surveys have been undertaken as part of the Environmental Studies to characterise the baseline environment are the methods used, any difficulties encountered and any uncertainties in the data described?			
3.20	Were the methods used appropriate for the purpose?			
3.21	Are any important gaps in the data on the existing environment identified and the means used to deal with these gaps during the assessment explained?			
3.22	If surveys would be required to adequately characterise the baseline environment but they have not been practicable for any reason, are the reasons explained and proposals set out for the surveys to be undertaken at a later stage?			
Other Questions on the Description of the Environment				

SECTION 4 DESCRIPTION OF THE LIKELY SIGNFICANT EFFECTS OF THE PROJECT

No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
Scoping of Effects				
4.1	Is the process by which the scope of the Environmental Studies was defined described? (for assistance, see the Scoping Guide in this series)			
4.2	Is it evident that a systematic approach to scoping was adopted?			
4.3	Is it evident that full consultation was carried out during scoping?			
4.4	Are the comments and views of consultees presented?			
Prediction of Direct Effects				
4.5	Are direct, primary effects on land uses, people and property described and where appropriate quantified?			
4.6	Are direct, primary effects on geological features and characteristics of soils described and where appropriate quantified?			
4.7	Are direct, primary effects on fauna and flora and habitats described and where appropriate quantified?			
4.8	Are direct, primary effects on the hydrology and water quality of water features described and where appropriate quantified?			
4.9	Are direct, primary effects on uses of the water environment described and where appropriate quantified?			
4.10	Are direct, primary effects on air quality and climatic conditions described and where appropriate quantified?			
4.11	Are direct, primary effects on the acoustic environment (noise or vibration) described and where appropriate quantified?			
4.12	Are direct, primary effects on heat, light or electromagnetic radiation described and where appropriate quantified?			
4.13	Are direct, primary effects on material assets and depletion of non-renewable natural resources (e.g. fossil fuels, minerals) described?			
4.14	Are direct, primary effects on locations or features of cultural importance described?			
4.15	Are direct, primary effects on the quality of the landscape and on views and viewpoints described and where appropriate illustrated?			
4.16	Are direct, primary effects on demography, social and socio-economic condition in the area described and where appropriate quantified?			
Prediction of Secondary, Temporary, Short Term, Permanent, Long Term, Accidental, Indirect, Cumulative Effects				

	SECTION 4 DESCRIPTION OF THE LIKELY SIGNFICANT EFFECTS OF THE PROJECT			
No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
4.17	Are secondary effects on any of the above aspects of the environment caused by primary effects on other aspects described and where appropriate quantified? (e.g. effects on fauna, flora or habitats caused by soil, air or water pollution or noise; effects on uses of water caused by changes in hydrology or water quality; effects on archaeological remains caused by desiccation of soils)			
4.18	Are temporary, short term effects caused during construction or during time limited phases of project operation or decommissioning described?			
4.19	Are permanent effects on the environment caused by construction, operation or decommissioning of the Project described?			
4.20	Are long term effects on the environment caused over the lifetime of Project operations or caused by build up of pollutants in the environment described?			
4.21	Are effects which could result from accidents, abnormal events or exposure of the Project to natural or man-made disasters described and where appropriate quantified?			
4.22	Are effects on the environment caused by activities ancillary to the main project described? (ancillary activities are part of the project but usually take place distant from the main Project location e.g. construction of access routes and infrastructure, traffic movements, sourcing of aggregates or other raw materials, generation and supply of power, disposal of effluents or wastes			
4.23	Are indirect effects on the environment caused by consequential development described? (consequential development is other projects, not part of the main Project, stimulated to take place by implementation of the Project e.g. to provide new goods or services needed for the Project, to house new populations or businesses stimulated by the Project)			
4.24	Are cumulative effects on the environment off the Project together with other existing or planned developments in the locality described? (different future scenarios including a worst case scenario should be described). For further guidance on assessment of cumulative impacts see *http://europa.eu.int/comm/ environment/eia/eia-support*			
4.25	Are the geographic extent, duration, frequency, reversibility and probability of occurrence of each effect identified as appropriate?			
Prediction of Effects on Human Health and Sustainable Development Issues				
4.26	Are primary and secondary effects on human health and welfare described and where appropriate quantified? (e.g. health effects caused by release of toxic substances to the environment, health risks arising from major hazards associated with the Project, effects caused by changes in disease vectors caused by the project, changes in living conditions, effects on vulnerable groups)			
4.27	Are impacts on issues such as biodiversity, global climate change and sustainable development discussed where appropriate?			
Evaluation of the Significance of Effects				

SECTION 4 DESCRIPTION OF THE LIKELY SIGNFICANT EFFECTS OF THE PROJECT				
No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
4.28	Is the significance or importance of each predicted effect discussed in terms of its compliance with legal requirement and the number, importance and sensitivity of people, resources or other receptors affected?			
4.29	Where effects are evaluated against legal standards or requirements are appropriate local, national or international standards used and relevant guidance followed?			
4.30	Are positive effects on the environment described as well as negative effects?			
4.31	Is the significance of each effect clearly explained?			
Impact Assessment Methods				
4.32	Are methods used to predict effects described and are the reasons for their choice, any difficulties encountered and uncertainties in the results discussed?			
4.33	Where there is uncertainty about the precise details of the Project and its impact on the environment are worst case predictions described?			
4.34	Where there have been difficulties in compiling the data needed to predict or evaluate effects are these difficulties acknowledged and their implications for the results discussed?			
4.35	Is the basis for evaluating the significance or importance of impacts clearly described?			
4.36	Are impacts described on the basis that all proposed mitigation has been implemented i.e. are residual impacts described?			
4.37	Is the level of treatment of each effect appropriate to its importance for the development consent decision? Does the discussion focus on the key issues and avoid irrelevant or unnecessary information?			
4.38	Is appropriate emphasis given to the most severe, adverse effects of the Project with lesser emphasis given to less significant effects			
Other Questions relevant to Description of Effects				

SECTION 5 DESCRIPTION OF MITIGATION				
No.	**Review Question**	**Relevant?**	**Adequately Addressed?**	**What further information is needed?**
5.1	Where there are significant adverse effects on any aspect of the environment is the potential for mitigation of these effects discussed?			
5.2	Are any measures which the developer proposes to implement to mitigate effects clearly described and their effect on the magnitude and significance of impacts clearly explained?			
5.3	If the effect of mitigation measures on the magnitude and significance of impacts is uncertain is this explained?			
5.4	Is it clear whether the Developer has made a binding commitment to implement the proposed mitigation or that the mitigation measures are just suggestions or recommendations?			
5.5	Are the Developer's reasons for choosing the proposed mitigation explained?			
5.6	Are responsibilities for implementation of mitigation including funding clearly defined?			
5.7	Where mitigation of significant adverse effects is not practicable or the developer has chosen not to propose any mitigation are the reasons for this clearly explained?			
5.8	Is it evident that the EIA Team and the Developer have considered the full range of possible approaches to mitigation including measures to reduce or avoid impacts by alternative strategies or locations, changes to the project design and layout, changes to methods and processes, "end of pipe" treatment, changes to implementation plans and management practices, measures to repair or remedy impacts and measures to compensate impacts?			
5.9	Are arrangements proposed to monitor and manage residual impacts?			
5.10	Are any negative effects of the proposed mitigation described?			
Other Questions on Mitigation				

	SECTION 6 NON TECHNICAL SUMMARY			
No.	Review Question	Relevant?	Adequately Addressed?	What further information is needed?
6.1	Does the Environmental information include a Non-Technical Summary?			
6.2	Does the Summary provide a concise but comprehensive description of the Project, its environment, the effects of the Project on the environment and the proposed mitigation?			
6.3	Does the Summary highlight any significant uncertainties about the Project and its environmental effects?			
6.4	Does the Summary explain the development consent process for the Project and the role of EIA in this process?			
6.5	Does the Summary provide an overview of the approach to the assessment?			
6.6	Is the Summary written in non-technical language, avoiding technical terms, detailed data and scientific discussion?			
6.7	Would it be comprehensible to a lay member of the public?			
Other Questions on Non Technical Summary				

SECTION 7 QUALITY OF PRESENTATION				
No.	**Review Question**	**Relevant?**	**Adequately Addressed?**	**What further information is needed?**
8.1	Is the Environmental Information available in one or more clearly defined documents?			
8.2	Is the document(s) logically organised and clearly structured so that the reader can locate information easily?			
8.3	Is there a table of contents at the beginning of the document(s)			
8.4	Is there a clear description of the process which has been followed?			
8.5	Is the presentation comprehensive but concise, avoiding irrelevant data and information?			
8.6	Does the presentation make effective use of tables, figures, maps, photographs and other graphics?			
8.7	Does the presentation make effective use of annexes or appendices to present detailed data not essential to understanding the main text?			
8.8	Are all analyses and conclusions adequately supported with data and evidence?			
8.9	Are all sources of data properly referenced?			
8.10	Is consistent terminology used throughout the document(s)?			
8.11	Does it read as a single document with cross referencing between sections used to help the reader navigate through the document(s)?			
8.12	Is the presentation demonstrably fair and as far as possible impartial and objective?			
Other Questions on Quality of Presentation				

OVERALL APPRAISAL OF THE EIS

If the reviewer wishes to use the Review Checklist to make an overall appraisal of the quality of Environmental Information, this can be done using the table below.

No.	Review Topic	Grade	Comment
1	CHARACTERISTICS OF THE PROJECT		
2	ALTERNATIVES CONSIDERED		
3	LOCATION OF THE PROJECT		
4	MITIGATION		
5	CHARACTERISTICS OF THE POTENTIAL IMPACTS		
6	PRESENTATIONAL ISSUES		

Overall Assessment:

Comment:

APPENDIX A

ENVIRONMENTAL INFORMATION REQUIREMENTS SET OUT IN ANNEX IV OF DIRECTIVE 97/11/EC

Article 5(1) of Directive 97/11/EC requires the Developer to provide to the Competent Authority the information set out below in so much as the information is relevant to the given stage of the consent procedure and to the specific characteristics of the project and of the environmental features likely to be affected, and the developer may reasonably be required to compile the information having regard *inter alia* to current knowledge and methods of assessment.

Environmental Information Requirements for EIA

1. Description of the project, including in particular:
   - a description of the physical characteristics of the whole project and the land-use requirements during the construction and operational phases,
   - a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used,
   - an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed project.

2. An outline of the main alternatives studied by the developer and an indication of the main reasons for this choice, taking into account the environmental effects.

3. A description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

4. A description of the likely significant effects of the proposed project on the environment resulting from:
   - the existence of the project,
   - the use of natural resources,
   - the emission of pollutants, the creation of nuisances and the elimination of waste,
   and the description by the developer of the forecasting methods used to assess the effects on the environment.

5. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment

6. A non-technical summary of the information provided under the above headings.

7. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information.

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