



Commission of European Communities, for
and on behalf of the Government of
Albania,

Ref.: EuropeAid/124909/C/SER/AL

Implementation of the National Plan for Approximation of Environmental Legislation in Albania

Component A: Legislation



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Environmental Impact Assessment Guidelines

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List of Abbreviations

EFA Environmental Forestry Agency

EIA Environmental Impact Assessment

1 Introduction

1. This document gives guidance on the draft Law “On Environmental Impact Assessment” (hereafter referred to as the Law on EIA). This Law transposes Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (the EIA Directive) as amended by Directive 97/11/EC and by Directive 2003/35/EC.
2. This Guide is mainly intended for use by staff at the Ministry of Environment, Forests and Water Administration, staff at the Regional Environmental Agencies, developers and consultants who prepare EIA Reports. It may also be of interest to other authorities who have a role in the EIA and development consent process and to members of the public who wish to gain a better understanding of EIA procedures in the Republic of Albania.
3. This new Law on EIA repeals Law No 8990 dated 23.01.2003 “On the Environmental Assessment” and the Law No 9700 dated 26.03.2007 “On Environmental Protection from Transboundary Impacts”.
4. This document is intended as a guide. It should be read alongside the Law itself. Any authoritative statement of the law can only be made by the Courts.

2 The EIA Directive

5. The main aim of the Directive is to ensure that the authority that gives development consent for a particular project makes its decision in the knowledge of any likely significant effects on the environment. The Directive sets out a procedure that must be followed for certain types of projects before they can be granted development consent. This environmental assessment procedure is a mechanism to collect together a systematic assessment of the likely significant environmental effects of a proposed project. This will help ensure that the importance of the predicted effects and the possibility of reducing those effects, are fully understood by the public and by the authority before it makes a decision on the development consent.
6. All projects listed in Annex I to the Directive are assumed to have likely significant effects on the environment and thus must always be subject to EIA.
7. Projects of the type listed in Annex II of the Directive must be subject to EIA whenever they are likely to have significant effects on the environment. Therefore a decision of whether or not an EIA is required (screening) for all projects listed in Annex II. This decision must be made available to the public.
8. When an EIA is required, there are three main steps to the EIA procedure:
 - a. The developer must compile detailed information about the proposed project and about the likely main environmental effects. To assist the developer in this task, any public authority that holds relevant information must make it available to the developer. The developer may also request an opinion from the competent authority as to what information should be included (scoping opinion);
 - b. This EIA Report must be made available to the public. Those authorities with specific environmental responsibilities and the public must be given an opportunity to give their comments and opinions about the proposed project and about the EIA Report;
 - c. The EIA Report, along with any other relevant information, and the comments opinions from the environmental authorities and the public must be taken into account by the competent authority in their decision-making process of deciding whether or not to grant development consent. The public must be informed of the decision and the reasons for that decision.

3 The Law on Environmental Impact Assessment

9. The Law applies to public as well as to private projects.
10. For developers the EIA process can help to identify the likely effects of a particular project at an early stage. This can produce improvements in the planning and design of the development; in decision-making by both parties; and in consultation and responses to the proposed development, particularly if combined with early consultations with the relevant authorities and other interested bodies during the preparatory stages. In addition, developers may find EIA a useful tool for considering alternative approaches to a development. This can result in a final proposal that is more environmentally acceptable. The presentation of environmental information in a more systematic way may also simplify the local planning authority's task of appraising the planning application and drawing up appropriate planning conditions, enabling swifter decisions to be reached.
11. The term 'environmental impact assessment' (EIA) describes a procedure that must be followed for certain types of project before they can be given 'development consent'. The procedure is a means of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects. This helps to ensure that the importance of the predicted effects, and the scope for reducing them, are properly understood by the public and the relevant authorities before they make their decision.
12. Environmental impact assessment enables environmental factors to be given due weight, along with economic or social factors, when the proposed project is being considered. It helps to promote a sustainable pattern of physical development and land and property use in cities, towns and the countryside. If properly carried out, it benefits all those involved in the planning process.

3.1 When is EIA required?

13. The Law applies to two separate lists of projects:
 - a. Annex I projects, for which a Profound EIA is required in every case;
 - b. Annex II projects, for which a Profound EIA is required only if that particular project is assessed likely to give rise to significant environmental effects.
14. Changes or extensions of projects listed in Annex I or Annex II which may have significant negative effects on the environment also fall within the scope of the Law.
15. Any project, whether on Annex I or II or not, which may have an impact on a Special Protected Area will automatically require a Preliminary EIA

16. Where in doubt, a developer is advised to consult with the Ministry or with EFA as to whether his project falls within the scope of the Law
17. For Annex II projects, whether a Profound EIA is required or not depends on the likelihood of “significant environmental effects”. This will depend, in part, on the type of project and the size of the project. The more environmentally sensitive the location, the more likely it is that the effects of project will be significant and that a Profound EIA will be required.

3.1.1 Screening

18. To help assist the Ministry in making its decision whether a project listed in Annex II will require a Profound EIA or not, the developer must first prepare a Preliminary EIA Report. This process is called screening.
19. The Preliminary EIA Report is first sent to EFA who makes a preliminary decision, and is then sent to the Ministry to make a final decision. In making its preliminary decision, EFA consults with a number of other relevant authorities to obtain their comments.
20. In making this screening decision, the basic question to be asked is “would this particular project be likely to have significant effects on the environment?”. If the answer is “yes” then a Profound EIA Report will be required. The following paragraphs may assist in making that decision and answering that question.
21. As a starting point, the authorities must take into account the criteria set out in Annex III of the Law. Annex III sets out the selection criteria which must be taken into account in deciding whether a project is likely to have significant effects on the environment. Not all the criteria will be relevant in every case.
22. However, Annex III identifies three broad criteria which should be considered:
 - a. Characteristics of the project (eg its size, use of natural resources, quantities of pollution and waste produced)
 - b. The environmental sensitivity of the proposed location
 - c. The characteristics of the potential impact (eg magnitude and duration)
23. Although the screening decision will be decided on a case-by-case basis, it is more likely that a Profound EIA will be required for:
 - a. Major projects which are of more than local importance
 - b. Projects which are proposed for locations that are particularly sensitive or vulnerable
 - c. Projects that are unusually complex and with potentially hazardous environmental effects.
24. These screening criteria are discussed now in more detail.
25. In some cases the scale of the proposed project, in itself, can be sufficient for it to have wide-ranging environmental effects, such that it would justify a Profound EIA.
26. The relationship between a proposed project and its location is a crucial consideration. The more environmentally sensitive the location, the more likely that its effects will be significant and will require a Profound EIA.
27. Special consideration must be given to any protected areas, especially those that are international conservation areas. This includes areas that are classified or are likely to be classified as Special Protected Areas under the Wild Birds Directive (79/404/EEC),

Special Areas of Conservation under the Habitats Directive (92/43/EEC), or Ramsar sites (wetlands of international importance). Special consideration must also be given to any cultural or archaeological protected sites. It is for this reason that EFA must consult with these relevant authorities.

28. In considering the sensitivity of a particular location, consideration must also be given to whether any national or internationally agreed environmental standards are already being approached or are being breached. This would include any air quality standards or any water quality standards.
29. For example, if the proposed project is at or near a beach, the effect of the proposed project on bathing water standards would be highly relevant.
30. Some proposed projects may be likely to have significant effects on the environment because of the particular nature of their impact. Consideration should be given to projects which could have complex, long-term or irreversible impacts, and where expert and detailed analysis of those impacts would be desirable and would be relevant to the issue of whether or not the project should be allowed. Industrial development involving emissions which are potentially hazardous to humans and nature may fall into this category.
31. There may be projects proposed for severely contaminated land. The development of the project itself may lead to more hazardous contaminants escaping from the site than would otherwise be the case if the development did not take place. Again, this needs to be taken into consideration.
32. When making its decision whether a Profound EIA is required or not, the authorities must ensure that they do not deal with that particular proposed project in isolation: they need to ensure that the developer (or developers) have not split a project up into smaller projects so as to try and avoid the need for a Profound EIA. If the specific project is more correctly viewed as an integral part of a larger project, then the assessment must be made on the basis of the larger project.
33. This is not to say that every project which forms part of a larger project must be considered in this context: it will be necessary to establish whether each of the proposed projects could proceed on their own and whether the aims of the Law are being evaded by the submission of a number of applications (salami slicing).
34. Projects which consist of a change or extension will only require a Profound EIA if the change or extension is likely to have significant environmental effects. However, the significance of any effects must be considered in the context of the existing development.

3.1.2 Screening checklists

35. To help the decision-makers in making the screening decision on a case-by-case basis, two checklists are included in Annex 1 to this Guide. These checklists should help and support the process of deciding whether or not a project is likely to have significant effects on the environment.
36. The first checklist, a screening checklist, provides a list of questions about the project and its environment. It can help answer the question "is this project likely to have significant effects on the environment?". The second checklist, a checklist of criteria for

evaluating the significance of environmental effects, is intended to be used alongside the screening checklist.

37. There is no one specific rule that can be used to decide whether a Profound EIA is required or not. Decisions are made on a case-by-case basis.
38. In theory, if there is one “yes” answer to a question in the screening checklist that it is likely to result in a significant effect, then a Profound EIA may be required.
39. However, as a general rule, the greater the number of “yes” answers and the greater the significance of the effects identified, then the more likely it is that a Profound EIA will be required.
40. Any answers resulting in a “?” which indicate uncertainty about the occurrence or significance of effects, should also point towards a positive screening decision (i.e. that a Profound EIA is required) because the EIA process will help to clarify the uncertainty.

3.2 The Profound EIA Report

41. It is the responsibility of the developer to prepare a Profound EIA Report, although he must use certified EIA consultants to do so.
42. The Profound EIA Report must include the information set out in the Law, and as relevant the information specified in Annex IV of the Law.
43. The Profound EIA Report should contain a full factual description of the project. However the emphasis of Annex IV of the Law is on the “main” or “significant” environment effects to which the project is likely to give rise.
44. In many cases only a few of the effects will be “significant” and will need to be discussed in some detail in the Profound EIA Report. Other impacts may be of little or no significance for the project in question and will need only very brief treatment to indicate that their possible relevance has been considered. While each Profound EIA Report must comply with the requirements of the Law, it is important that they should be prepared on a realistic basis and without unnecessary elaboration.
45. The Law also requires that the Profound EIA Report contains an outline of the main alternatives studied by the developer and the main reasons for his choice.
46. The list of aspects of the environment which may be significantly affected by a project are set out in the Law and includes: human beings; flora; fauna; soil; water; air; climate; landscape; material assets, including architectural and archaeological heritage; and the interaction between any of the foregoing.
47. The Law indicates, among other things, that consideration should also be given to the likely significant effects resulting from use of natural resources, the emission of pollutants, the creation of nuisances and the elimination of waste.
48. In addition to the direct effects of a development, the Profound EIA Report should also cover indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects.

49. These are comprehensive lists, and a particular project may of course give rise to significant effects, and require full and detailed assessment, in only one or two respects.
50. The information in the Profound EIA Report must be summarised in a non-technical summary. This non-technical summary is especially important for ensuring that the public can make their comments on the Profound EIA Report and on the project. The Report may, of necessity, contain complex scientific data and analysis in a form which is not readily understandable by the lay person. The nontechnical summary should set out the main findings of the Profound EIA Report in accessible plain language.

3.2.1 Content of the Profound EIA Report

51. There is no obligation on the developer to consult anyone on the content and details of the Profound EIA Report (its scope). However there are generally good reasons to do so. If the information provided in the Profound EIA Report is later found by the Ministry to be defective or lacking, the developer will have to go back and provide further information.
52. Local authorities may often have useful local and specialised information and may be able to highlight areas of particular concern.
53. The developer is able to obtain a preliminary scoping decision from the Ministry. If he does so, he should probably provide the Ministry of an outline of the Profound EIA Report giving an indication of what he thinks are the main issues. This will help provide a focus for the preliminary scoping opinion.
54. The Ministry must consult with specified authorities before giving the preliminary scoping opinion. The fact that the Ministry has given a preliminary scoping opinion will not prevent the Ministry being able to ask for further information, if needed, when the Profound EIA Report is submitted.

3.2.2 Scoping

55. The purpose of scoping is to identify the matters which should be covered in the environmental information (Profound EIA Report) submitted by the developer to the Ministry and, in particular to identify the matters which are of most importance so that these can be addressed in most detail. Scoping should ensure that all the relevant issues are identified and addressed in an appropriate manner in the environmental studies.
56. The environmental effects of a project during its construction and commissioning stages should be considered separately from the effects arising while it is operational (if that project has an 'operational' stage).
57. Where the operational life of the project is expected to be limited, the effects of decommissioning or rehabilitation of the land should be considered separately.
58. Where alternative approaches to the project have been considered, the developer is required by the Law to include in the Profound EIA Report an outline of the main alternatives and the main reasons for his choice. Although the Law does not expressly require the developer to study alternatives, the nature of certain projects and their location may make the consideration of alternative sites an important consideration. In such cases the Profound EIA Report must include a record of this consideration of

alternative sites. More generally, consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice.

3.2.3 Scoping Checklist

59. Scoping is therefore primarily focused on identifying the impacts to be assessed and which of these are most important, but it may also address some or all of the following matters:
- the types of alternative which ought to be considered;
 - the baseline studies which are required to characterise the existing environment;
 - any special requirements for baseline studies regarding their geographical extent or timing e.g. because of seasonal changes in fauna and flora;
 - the level of detail of investigations required;
 - the methods to be used to predict the magnitude of environmental effects;
 - the criteria against which the significance of effects should be evaluated;
 - the types of mitigation to be considered;
 - any further consultations to be carried out during the environmental studies;
 - the structure, content and length of the environmental information (or Report);
 - the membership and management of the EIA Team;
 - the work-plan and resourcing for the environmental studies.
60. Three checklists are provided in Annex 2 to help with scoping.
61. The Scoping Checklist (Annex 2.A) is in two parts: The first part provides a detailed list of characteristics of projects which could give rise to significant effects on the environment. The second part provides a list of characteristics of project environments which could be susceptible to significant adverse effects.
62. A Checklist of criteria for evaluating the significance of environmental effects (Annex 2.B). This provides a list of factors to be considered in deciding whether or not an impact is likely to be significant.
63. A Checklist on alternatives and mitigation measures (Annex 2.C). These should also be considered in the scoping exercise.
64. It should be remembered that consideration of alternatives may need to be considered in the context of alternative locations and or alternative processes.
65. The decision about the choice of site should be based on consideration of as many types of environmental impacts as possible for which there is data available.
66. The consideration of alternatives will probably also need to include consideration of other relevant factors, such as cost effectiveness and potential for mitigation.

3.2.4 Indirect and cumulative impacts and impact interactions

67. The Law requires that the Profound EIA Report contains a description of the likely significant effects of the project on the environment. This description should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project. The description should also cover the inter-relationship between impacts (impact interactions).

68. This part of the Guide focuses on providing guidance on indirect and cumulative impacts and on impact interactions.
69. These terms are not defined in the Law. There are no internationally agreed and accepted definitions. However, the following interpretations may be of use.
70. **Indirect impacts.** Impacts on the environment, which are not a direct result of the project, are often produced away from the project or as a result of a complex pathway. Examples of indirect impacts could include:
- a. A project changes the water table and thus affects a nearby wetland causing an impact on the ecology of that wetland;
 - b. Noise attenuation barriers used as a mitigation measure then result in a visual impact;
 - c. The development of a project itself attracts ancillary or other projects.
71. **Cumulative impacts.** Impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project. Examples of cumulative impacts could include:
- a. Incremental noise from a number of separate projects;
 - b. Combined effect of individual impacts, e.g. noise, dust and visual, from one project on a particular receptor;
 - c. Several projects with insignificant impacts individually but which together have a cumulative effect, e.g. development of a golf course may have an insignificant impact, but when considered with several nearby golf courses there could be a significant cumulative impact on local ecology and landscape.
72. **Impact interactions.** The reactions between impacts, whether between the impacts of just one project or between the impacts of other projects in the area. Examples of impact interactions could include:
- a. A chemical plant producing two streams of waste that are individually acceptable but react in combination producing highly significant levels of pollution;
 - b. Emissions to air from one project reacting with emissions from an existing development.
 - c. Two major projects being constructed next to one another and during overlapping time periods will have many interactive impacts, from land use issues to construction and operational noise.
73. It is also important to consider **cross-media impacts**. An impact that affects one environmental medium may also have an indirect impact on other media. This indirect effect can sometimes be more significant than the direct effect. For example, in some cases, changes in noise or vibration levels may have a significant effect on nesting birds and other animals. While the additional noise may not constitute a significant increase when using simple assessment methods, the indirect impacts on the ecology may be significant.
74. Visual impacts may also have an indirect impact on the amenity value of site of historical or cultural interest. Without an analysis of indirect impacts, the visual intrusion may not be considered as significant: However, the indirect impacts may be considered as significant.
75. It is beyond the scope of this Guide to go into detail on the methods and tools that are available for assessing indirect and cumulative impacts and impact interactions. The European Commission has provided some useful guidance which may be of interest:

“Guidelines for the assessment of indirect and cumulative impacts as well as impact interactions”, May 1999.

76. However, some comments can be made here about indirect and cumulative effects and impact interactions, especially as regards scoping.
77. It is important during the scoping process to be aware of the need to address such impacts as appropriate to the project. By being aware of the potential for such impacts at an early stage of the process, this can help ensure that the collection of relevant information such as baseline data, assessment needs and resources required is properly taken into account.
78. The key elements for scoping in this regard include:
- a. Setting geographic and time frame boundaries for the assessment;
 - b. Mapping the boundaries;
 - c. Collecting the baseline data;
 - d. Assessing the impacts.
79. It is important for the scoping process to set the boundary or ‘limit’ for that part of the Profound EIA Report that will deal with the assessment of indirect and cumulative impacts and impact interactions. Such boundaries must be established on a project by project basis. There are two types of boundary that need to be considered: a geographic or ‘spatial’ boundary; and a temporal or ‘time-frame’ boundary.
80. Indirect and cumulative impacts and impact interactions may very well extend beyond the geographic site boundaries of the project. Therefore it is essential to determine the geographic boundaries for the assessment to ensure that the impacts associated with a project are assessed comprehensively wherever possible.
81. Geographic boundaries will depend on:
- a. The nature of the project;
 - b. The nature of the impacts;
 - c. Sensitivity of the receiving environment;
 - d. Availability of data;
 - e. Natural boundaries.
82. For example, the geographical boundary for an air quality assessment of a sewage treatment works may be determined by the presence of a residential area. In comparison, the geographical boundary for impacts on traffic as a result of a new major industrial development may cover a much wider geographical area based on the local or even regional road network.
83. It is also necessary to consider any historical or potential future impacts which may affect the assessment for the project. Activities in the past, present and future can all have a bearing on the project being assessed and will influence the time frame set for the Profound EIA Report. Setting temporal or time frames or ‘boundaries’ will allow for the inclusion of past and future developments which could lead to indirect or cumulative impacts or impact interactions.
84. Time boundaries will depend upon:
- a. Historical use of the area, e.g. industrial activities or landfill;
 - b. Information available;
 - c. The local, or national planning horizons for future development;
 - d. Lifespan of the project from construction to decommissioning.

85. From a practical point of view, the extent of the assessment in terms of how far into the past and into the future will be dependent upon the availability and quality of information. Past activities can often be identified from historical maps, present activities from current maps, and future development activities from development plans.
86. How far back in time information needs to be considered will depend on the project and the historical use of the area. For example, in an area where there has been a history of long term pollution from industrial activities or landfill it may be necessary to set the time limit as far back as 50 or even 100 years.
87. Setting the time boundary in terms of future developments can be based on information provided from the relevant planning authorities and from information contained within development plans produced by local, regional or national authorities. Because of the uncertainty associated with most future development proposals or plans, it is probably not appropriate to set the future time boundary at more than five years for the majority of cases.
88. The lifespan of the actual project, from construction through to decommissioning and restoration, may be considered reasonable upon which to base the assessment of these impact types, particularly where there may be a set lifespan, for example for a quarry or landfill. However, this can prove to be more difficult for projects which do not have such specific life spans such as roads.
89. There are limitations in defining the area and time boundary that would be affected by the project. For example, it is probably only reasonable to consider current events and those that will take place in foreseeable future. Furthermore, the assessment can only be based on the data that is readily available.
90. There needs to be a cut off point at which it can be said that the impacts cannot be reasonably attributed to the project. This should be established. For example, this may be the point beyond which there can no longer be any reasonable mitigation. The Profound EIA Report should define the cut-off point used in the assessment.
91. It may be useful for the developer to map geographical and time boundaries to show areas of potential impact which may overlap, and therefore where indirect and cumulative impacts or impact interactions may occur.
92. Geographical boundaries can be mapped to indicate which areas will be considered in the assessment for each topic, or environmental parameter. In considering the 'time boundary' past, present and future land uses can be mapped in a similar way.
93. The developer should also, during the scoping process, consider what baseline data will be required. Some baseline data should be collected at this stage which will assist with identifying potential impacts and sensitive receptors. Any lack or deficiencies in data should also be identified – which may result in requirements for any additional surveys.
94. It is important at this early stage of the project to determine if additional data needs to be collected or if any surveys need to be conducted to allow assessment of indirect and cumulative impacts as well as impact interactions.

3.2.5 Checklist of matters to be considered for inclusion in a Profound EIA Report

95. Annex 3 sets out a checklist of matters to be considered for inclusion in a Profound EIA Report. This checklist can be of assistance to the developer to ensure that he has included all relevant information in sufficient detail.

3.3 Review of the Profound EIA Report

96. The Law sets out the details of what must be included in the Report and what only has to be included if it is relevant to the particular project. It is unlikely that every item mentioned in the Law will be relevant to a particular project (this is why scoping is so important).
97. Once the Ministry receives the copies of the Profound EIA Report, it will carry out a first assessment. This first assessment is not a detailed assessment but is to ensure that, from an administrative point of view, the developer has submitted a Report that is in compliance with the Law.
98. If, during the substantive review, the Ministry realises that it needs more information for it to make its opinion on the proposed project and on the Profound EIA Report, it can request such additional information from the developer.
99. The Ministry must send copies of the Report, and any additional information, to EFA, the local authority and certain other authorities for their comments and suggestions. The Law also provides for a public consultation process.
100. The Ministry must give its Opinion on the proposed project, taking into consideration the Profound EIA Report and the structure, scope, scale, size, capacity and location of the planned project and the direct and indirect impacts of that proposed project. In making its Opinion, the Ministry must also take into account any comments and suggestions received from any other authority and from the public.
101. The substantive review of the Profound EIA Report by the Ministry will help establish whether the information submitted by the developer in the Report is adequate for the Ministry to give its Opinion. This part of the Guide sets out some guidance on this reviewing of the Profound EIA Report.
102. Annex 4 sets out a Review Checklist which is aimed to help review the adequacy of the information provided in the Profound EIA Report: that is to say, whether the information provided is complete and sufficient enough from a content and Opinion making point of view. Of course, if the information is not adequate, the Ministry must request additional information from the developer.
103. The Review Checklist should also help to ensure that the information provided by the developer is in a suitable format so that the public will be able to usefully comment on the project and its environmental impacts.
104. A good Profound EIA Report will be written so as to provide good information to the two principle audiences: the Ministry (as Opinion maker) and the people potentially affected by the project.

105. While the Profound EIA Report must, of course, comply with the requirements of the Law, it should also:
- a. Have 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.
 - b. Have a table of contents at the beginning of the document.
 - c. Have a clear description of the development consent procedure and how EIA fits within it.
 - d. Read as a single document with appropriate cross-referencing.
 - e. Be concise, comprehensive and objective.
 - f. Be written in an impartial manner without bias.
 - g. Include a full description of the development proposals.
 - h. Make effective use of diagrams, illustrations, photographs and other graphics to support the text.
 - i. Use consistent terminology with a glossary.
 - j. Contain references for all information sources used.
 - k. Have a clear explanation of complex issues.
 - l. Contain a good description of the methods used for the studies of each environmental topic.
 - m. Cover each environmental topic in a way which is proportionate to its importance.
 - n. Provide evidence of good consultations.
 - o. Include a clear discussion of alternatives.
 - p. Make a commitment to mitigation (with a programme) and to monitoring.
 - q. Have a Non Technical Summary which does not contain technical jargon.

Annex 1 Screening Checklists

1.A Screening Checklist¹

Instructions for use

This checklist is designed to help users decide whether a Profound EIA is required or not for a particular project, based on the characteristics of the project and its environment.

1. Start by providing a brief description of the project.
2. Then using available information about the project, answer each of the questions in column 2. Answers should be either:
 - a. Yes
 - b. No, or
 - c. ?, if you do not know or are not sure of the answer
3. If there is any uncertainty as to what may be important, the detailed list of questions in the Scoping checklist (below) may help answer the question
4. Also in column 2 briefly describe the relevant characteristic of the project or its environment
5. Next consider whether any effect that is identified as being likely, is also likely to be significant, and enter the answer in column 3
6. Also in column 3, briefly give the reasons for the answer
7. The checklist on criteria for evaluating significance (Annex 1.B) may help answer the question “is this likely to result in a significant effect?”

| Questions to be considered | Yes/No Briefly describe | Is this likely to result in a significant effect? Yes/No? Why? |
|---|----------------------------|--|
| <i>Brief Project description</i> | | |
| 1. Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in water bodies, etc)? | | |
| 2. Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially | | |

¹ These Checklists are taken from the European Commission Guidance on Screening, June 2001

| Questions to be considered | Yes/No Briefly describe | Is this likely to result in a significant effect? Yes/No? Why? |
|---|------------------------------------|---|
| any resources which are non-renewable or in short supply? | | |
| 3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health? | | |
| 4. Will the Project produce solid wastes during construction or operation or decommissioning? | | |
| 5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air? | | |
| 6. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation? | | |
| 7. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea? | | |
| 8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment? | | |
| 9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment? | | |
| 10. Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality? | | |
| 11. Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project? | | |
| 12. Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project? | | |
| 13. Are there any areas on or around the | | |

| Questions to be considered | Yes/No Briefly describe | Is this likely to result in a significant effect? Yes/No? Why? |
|--|------------------------------------|---|
| location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project? | | |
| 14. Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project? | | |
| 15. Are there any areas or features of high landscape or scenic value on or around the location which could be affected by the project? | | |
| 16. Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project? | | |
| 17. Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project? | | |
| 18. Is the project in a location where it is likely to be highly visible to many people? | | |
| 19. Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project? | | |
| 20. Is the project located in a previously undeveloped area where there will be loss of greenfield land? | | |
| 21. Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project? | | |
| 22. Are there any plans for future land uses on or around the location which could be affected by the project? | | |
| 23. Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project? | | |
| 24. Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could | | |

| Questions to be considered | Yes/No Briefly describe | Is this likely to result in a significant effect? Yes/No? Why? |
|---|------------------------------------|---|
| be affected by the project? | | |
| 25. Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project? | | |
| 26. Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project? | | |
| 27. Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems? | | |

Annex 1.B Checklist Of Criteria For Evaluating The Significance Of Environmental Effects

This checklist is intended to help users decide whether Profound EIA is required based on the characteristics of the likely impacts of the project. It should be used in conjunction with the Screening Checklist (1.A).

The Screening Checklist helps identify where there is the potential for interactions between a project and the environment. This Checklist helps decide whether those interactions (effects) are likely to be significant.

The questions are designed so that a “yes” answer will generally point towards the need for a Profound EIA, while a “no” will generally point towards a Profound EIA not being needed.

Questions to be considered

1. Will there be a large change in environmental conditions?
2. Will new features be out-of-scale with the existing environment?
3. Will the effect be unusual in the area or particularly complex?
4. Will the effect extend over a large area?
5. Will there be any potential for trans-boundary impact?
6. Will many people be affected?
7. Will many receptors of other types (fauna and flora, businesses, facilities) be affected?
8. Will valuable or scarce features or resources be affected?
9. Is there a risk that environmental standards will be breached?
10. Is there a risk that protected sites, areas, features will be affected?
11. Is there a high probability of the effect occurring?
12. Will the effect continue for a long time?
13. Will the effect be permanent rather than temporary?
14. Will the impact be continuous rather than intermittent?
15. If it is intermittent will it be frequent rather than rare?
16. Will the impact be irreversible?
17. Will it be difficult to avoid, or reduce or repair or compensate for the effect?

Annex 2 Scoping Checklists²

Annex 2.A.1 Project Characteristics

| No. | Questions to be considered in scoping | Yes/No? | Which Characteristics of the Project Environment could be affected and how? | Is the effect likely to be significant? Why? |
|------|--|---------|---|--|
| 1 | Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in water bodies, etc)? | | | |
| 1.1 | Permanent or temporary change in land use, land cover or topography including increases in intensity of land use? | | | |
| 1.2 | Clearance of existing land, vegetation and buildings? | | | |
| 1.3 | Creation of new land uses? | | | |
| 1.4 | Pre-construction investigations eg boreholes, soil testing? | | | |
| 1.5 | Construction works? | | | |
| 1.6 | Demolition works? | | | |
| 1.7 | Temporary sites used for construction works or housing of construction workers? | | | |
| 1.8 | Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations? | | | |
| 1.9 | Underground works including mining or tunnelling? | | | |
| 1.10 | Reclamation works? | | | |
| 1.11 | Dredging? | | | |
| 1.12 | Coastal structures eg | | | |

² These Scoping Checklists are taken from the European Commission Guidance on Scoping, June 2001

| No. | Questions to be considered in scoping | Yes/No? | Which Characteristics of the Project Environment could be affected and how? | Is the effect likely to be significant? Why? |
|------|--|---------|---|--|
| | seawalls, piers? | | | |
| 1.13 | Offshore structures? | | | |
| 1.14 | Production and manufacturing processes? | | | |
| 1.15 | Facilities for storage of goods or materials? | | | |
| 1.16 | Facilities for treatment or disposal of solid wastes or liquid effluents? | | | |
| 1.17 | Facilities for long term housing of operational workers? | | | |
| 1.18 | New road, rail or sea traffic during construction or operation? | | | |
| 1.19 | New road, rail, air, waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? | | | |
| 1.20 | Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? | | | |
| 1.21 | New or diverted transmission lines or pipelines? | | | |
| 1.22 | Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers? | | | |
| 1.23 | Stream crossings? | | | |
| 1.24 | Abstraction or transfers of water from ground or surface waters? | | | |
| 1.25 | Changes in water bodies or the land surface affecting drainage or run-off? | | | |
| 1.26 | Transport of personnel or materials for construction, operation or decommissioning? | | | |
| 1.27 | Long term dismantling or decommissioning or restoration works? | | | |
| 1.28 | Ongoing activity during decommissioning which could | | | |

| No. | Questions to be considered in scoping | Yes/No? | Which Characteristics of the Project Environment could be affected and how? | Is the effect likely to be significant? Why? |
|------|--|---------|---|--|
| | have an impact on the environment? | | | |
| 1.29 | Influx of people to an area in either temporarily or permanently? | | | |
| 1.30 | Introduction of alien species? | | | |
| 1.31 | Loss of native species or genetic diversity? | | | |
| 1.32 | Any other actions? | | | |
| 2 | Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply? | | | |
| 2.1 | Land especially undeveloped or agricultural land? | | | |
| 2.2 | Water? | | | |
| 2.3 | Minerals? | | | |
| 2.4 | Aggregates? | | | |
| 2.5 | Forest and timber? | | | |
| 2.6 | Energy including electricity and fuels? | | | |
| 2.7 | Any other resources? | | | |
| 3 | Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health? | | | |
| 3.1 | Will the project involve use of substances or materials which are hazardous or toxic to human health or the environment (flora, fauna, water supplies)? | | | |
| 3.2 | Will the project result in changes in occurrence of disease or affect disease vectors (eg insect or water borne diseases)? | | | |
| 3.3 | Will the project affect the welfare of people eg by changing living conditions? | | | |
| 3.4 | Are there especially vulnerable groups of people who could be affected by the project eg hospital patients, the elderly? | | | |
| 3.5 | Any other causes? | | | |
| 4 | Will the Project produce solid wastes during construction or operation or decommissioning? | | | |
| 4.1 | Spoil, overburden or mine wastes? | | | |

| No. | Questions to be considered in scoping | Yes/No? | Which Characteristics of the Project Environment could be affected and how? | Is the effect likely to be significant? Why? |
|------|---|---------|---|--|
| 4.2 | Municipal waste (household and or commercial wastes)? | | | |
| 4.3 | Hazardous or toxic wastes (including radioactive wastes)? | | | |
| 4.4 | Other industrial process wastes? | | | |
| 4.5 | Surplus product? | | | |
| 4.6 | Sewage sludge or other sludges from effluent treatment? | | | |
| 4.7 | Construction or demolition wastes? | | | |
| 4.8 | Redundant machinery or equipment? | | | |
| 4.9 | Contaminated soils or other material? | | | |
| 4.10 | Agricultural wastes? | | | |
| 4.11 | Any other solid wastes? | | | |
| 5 | Will the Project release pollutants or any hazardous, toxic or noxious substances to air? | | | |
| 5.1 | Emissions from combustion of fossil fuels from stationary or mobile sources? | | | |
| 5.2 | Emissions from production processes? | | | |
| 5.3 | Emissions from materials handling including storage or transport? | | | |
| 5.4 | Emissions from construction activities including plant and equipment? | | | |
| 5.5 | Dust or odours from handling of materials including construction materials, sewage and waste? | | | |
| 5.6 | Emissions from incineration of waste? | | | |
| 5.7 | Emissions from burning of waste in open air (eg slash material, construction debris)? | | | |
| 5.8 | Emissions from any other sources? | | | |
| 6 | Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation? | | | |
| 6.1 | From operation of equipment eg engines, ventilation plant, crushers? | | | |

| No. | Questions to be considered in scoping | Yes/No? | Which Characteristics of the Project Environment could be affected and how? | Is the effect likely to be significant? Why? |
|-----|--|---------|---|--|
| 6.2 | From industrial or similar processes? | | | |
| 6.3 | From construction or demolition? | | | |
| 6.4 | From blasting or piling? | | | |
| 6.5 | From construction or operational traffic? | | | |
| 6.6 | From lighting or cooling systems? | | | |
| 6.7 | From sources of electromagnetic radiation (consider effects on nearby sensitive equipment as well as people)? | | | |
| 6.8 | From any other sources? | | | |
| 7 | Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into sewers, surface waters, groundwater, coastal waters or the sea? | | | |
| 7.1 | From handling, storage, use or spillage of hazardous or toxic materials? | | | |
| 7.2 | From discharge of sewage or other effluents (whether treated or untreated) to water or the land? | | | |
| 7.3 | By deposition of pollutants emitted to air, onto the land or into water? | | | |
| 7.4 | From any other sources? | | | |
| 7.5 | Is there a risk of long term build up of pollutants in the environment from these sources? | | | |
| 8 | Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment? | | | |
| 8.1 | From explosions, spillages, fires etc from storage, handling, use or production of hazardous or toxic substances? | | | |
| 8.2 | From events beyond the limits of normal environmental protection eg failure of pollution control systems? | | | |
| 8.3 | From any other causes? | | | |
| 8.4 | Could the project be affected by natural disasters causing environmental damage (eg | | | |

| No. | Questions to be considered in scoping | Yes/No? | Which Characteristics of the Project Environment could be affected and how? | Is the effect likely to be significant? Why? |
|------|---|---------|---|--|
| | floods, earthquakes, landslip, etc)? | | | |
| 9 | Will the Project result in social changes, for example, in demography, traditional lifestyles, employment? | | | |
| 9.1 | Changes in population size, age, structure, social groups etc? | | | |
| 9.2 | By resettlement of people or demolition of homes or communities or community facilities eg schools, hospitals, social facilities? | | | |
| 9.3 | Through in-migration of new residents or creation of new communities? | | | |
| 9.4 | By placing increased demands on local facilities or services eg housing, education, health? | | | |
| 9.5 | By creating jobs during construction or operation or causing the loss of jobs with effects on unemployment and the economy? | | | |
| 9.6 | Any other causes? | | | |
| 10 | Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality? | | | |
| 10.1 | Will the project lead to pressure for consequential development which could have significant impact on the environment eg more housing, new roads, new supporting industries or utilities, etc? | | | |
| 10.2 | Will the project lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment eg: <ul style="list-style-type: none"> • supporting infrastructure (roads, power supply, waste or waste water treatment, etc) • housing development • extractive industries | | | |

| No. | Questions to be considered in scoping | Yes/No? | Which Characteristics of the Project Environment could be affected and how? | Is the effect likely to be significant? Why? |
|------|---|---------|---|--|
| | <ul style="list-style-type: none"> • supply industries • other? | | | |
| 10.3 | Will the project lead to after-use of the site which could have an impact on the environment? | | | |
| 10.4 | Will the project set a precedent for later developments? | | | |
| 10.5 | Will the project have cumulative effects due to proximity to other existing or planned projects with similar effects? | | | |

Instructions for use

This checklist is designed to help users identify the likely significant environmental effects of proposed projects during scoping. It is to be used in conjunction with the Checklist of criteria for evaluating the significance of impacts (Annex 2.A.2).

There are two stages:

1. identifying the potential impacts of projects;
2. selecting those which are likely to be significant and therefore require most attention in the assessment.

A useful way of identifying the potential impacts of a project is to identify all the activities or sources of impact that could arise from construction, operation or decommissioning of the project, and to consider these alongside the characteristics of the project environment that could be affected, to identify where there could be interactions between them. The two parts of the Scoping Checklist have been developed to assist in this process.

1. Complete column 2 by answering:
 - “yes” - if the activity is likely to occur during implementation of the project;
 - “no” - if it is not expected to occur;
 - “?” - if it is uncertain at this stage whether it will occur or not.
2. For each activity for which the answer in column 2 is “yes” or “?”, use the checklist in part 2 (Annex 2.A.2) which lists characteristics of the project environment which could be affected, and identify any which could be affected by that activity. Information will be needed about the surrounding environment in order to complete this stage.
3. Note the characteristics of the project environment that could be affected, and the nature of the potential effects in Column 3.
4. Finally, use Checklist of Criteria for Evaluating the Significance of Impacts (Annex 2.B) to help complete Column 4. This will identify those impacts which are expected to be significant. The questions are designed so that a “yes” answer will point towards

a significant impact. It is often difficult to decide what is or is not significant but a useful simple check is to ask whether the effect is one that is of sufficient importance that it ought to be considered and have an influence on the development consent decision. As much information as possible about the degree of significance should be included in Column 4 as a guide for planning the environmental studies.

When using this Scoping Checklist it is important to remember that **secondary and higher order effects** can occur as a result of a **primary interaction** between a project activity and the project environment. So for example, a change in site run-off can affect the hydrology of a watercourse; this can subsequently affect water quality and the ecology of the watercourse; and this can then affect fishing and other uses of the water. Where a primary effect is identified consideration always needs to be taken whether secondary or further effects on other aspects of the environment could arise as a result.

It should also be remembered that effects can occur not only **permanently** and over the **long term** but also **temporarily**, for example just during construction, commissioning or decommissioning or just during certain phases of project operation, or that may occur only **intermittently**, for example during certain periods of activity or times of year or as **a result of abnormal events** affecting the project (accidents, freak weather conditions, earthquakes, etc.).

The Law also requires the Profound EIA Report to consider effects that could arise **indirectly** from the project, for example as a result of other development which takes place as a consequence of the project e.g. to provide access, power or water supplies, sewage treatment or waste disposal, or to house or provide jobs for people attracted to the area by the project. It also requires consideration of **cumulative effects** that could arise from a combination of the project's effects with those of other existing or planned developments in the surrounding area.

Annex 2.A.2 Characteristics Of The Project Environment

For each project characteristic identified in Annex 2.A.1, it needs to be considered whether any of the flowing environmental components could be affected.

| No. | Question | Yes/No? |
|-----|---|---------|
| 1 | Are there features of the local environment on or around the Project location which could be affected by the Project? | |
| | Areas which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project? | |
| | Other areas which are important or sensitive for reasons of their ecology e.g. <ul style="list-style-type: none"> • Wetlands, • Watercourses or other water bodies, • the coastal zone, • mountains, • forests or woodlands | |
| | Areas used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project? | |
| | Inland, coastal, marine or underground waters? | |
| | Areas or features of high landscape or scenic value? | |
| | Routes or facilities used by the public for access to recreation or other facilities? | |
| | Transport routes which are susceptible to congestion or which cause environmental problems? | |
| | Areas or features of historic or cultural importance? | |
| 2 | Is the Project in a location where it is likely to be highly visible to many people? | |
| 3 | Is the Project located in a previously undeveloped area where there will be loss of greenfield land? | |
| 4 | Are there existing land uses on or around the Project location which could be affected by the Project? For example: <ul style="list-style-type: none"> • Homes, gardens, other private property, • Industry, • Commerce, • Recreation, • public open space, • community facilities, • agriculture, • forestry, • tourism, • mining or quarrying | |
| 5 | Are there any plans for future land uses on or around the location which could be affected by the Project? | |
| 6 | Are there any areas on or around the location which are densely populated or built-up, which could be affected by the Project? | |
| 7 | Are there any areas on or around the location which are occupied by sensitive land uses which could be affected by the Project? | |

| No. | Question | Yes/No? |
|-----|---|---------|
| | <ul style="list-style-type: none"> • hospitals, • schools, • places of worship, • community facilities | |
| 8 | <p>Are there any areas on or around the location which contain important, high quality or scarce resources which could be affected by the Project? For example:</p> <ul style="list-style-type: none"> • groundwater resources, • surface waters, • forestry, • agriculture, • fisheries, • tourism, • minerals. | |
| 9 | <p>Are there any areas on or around the location of the Project which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?</p> | |
| 10 | <p>Is the Project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?</p> | |
| 11 | <p>Is the Project likely to affect the physical condition of any environmental media?</p> | |
| | <p>The atmospheric environment including microclimate and local and larger scale climatic conditions?</p> | |
| | <p>Water - eg quantities, flows or levels of rivers, lakes, groundwater. Estuaries, coastal waters or the sea?</p> | |
| | <p>Soils - eg quantities, depths, humidity, stability or erodibility of soils?</p> | |
| | <p>Geological and ground conditions?</p> | |
| 12 | <p>Are releases from the Project likely to have effects on the quality of any environmental media?</p> | |
| | <p>Local air quality?</p> | |
| | <p>Global air quality including climate change and ozone depletion?</p> | |
| | <p>Water quality – rivers, lakes, groundwater. estuaries, coastal waters or the sea?</p> | |
| | <p>Nutrient status and eutrophication of waters?</p> | |
| | <p>Acidification of soils or waters?</p> | |
| | <p>Soils?</p> | |
| | <p>Noise?</p> | |
| | <p>Temperature, light or electromagnetic radiation including electrical interference?</p> | |
| | <p>Productivity of natural or agricultural systems?</p> | |
| 13 | <p>Is the Project likely to affect the availability or scarcity of any resources either locally or globally?</p> | |
| | <p>Fossil fuels?</p> | |
| | <p>Water?</p> | |
| | <p>Minerals and aggregates?</p> | |
| | <p>Timber?</p> | |
| | <p>Other non-renewable resources?</p> | |

| No. | Question | Yes/No? |
|-----|---|---------|
| | Infrastructure capacity in the locality - water, sewerage, power generation and transmission, telecommunications, waste disposal roads, rail? | |
| 14 | Is the Project likely to affect human or community health or welfare? | |
| | The quality or toxicity of air, water, foodstuffs and other products consumed by humans? | |
| | Morbidity or mortality of individuals, communities or populations by exposure to pollution? | |
| | Occurrence or distribution of disease vectors including insects? | |
| | Vulnerability of individuals, communities or populations to disease? | |
| | Individuals' sense of personal security? | |
| | Community cohesion and identity? | |
| | Cultural identity and associations? | |
| | Minority rights? | |
| | Housing conditions? | |
| | Employment and quality of employment? | |
| | Economic conditions? | |
| | Social institutions? | |

Annex 2.B Checklist Of Criteria For Evaluating The Significance Of Environmental Effects

This checklist is to help determine whether or not an impact is likely to be significant. This checklist should be used in conjunction with the Scoping checklist (Annex 2.A). The Scoping checklist helps identify where there is the potential for interactions between a project and its environment. This checklist is designed to help decide whether those interactions - effects - are likely to be significant.

It is often difficult to define what is “significant” in any particular situation. A useful simple check is to ask whether the effect is one that ought to be considered and to have an influence on the decision. At the early stages of a project there is likely to be little information on which to base this decision but the following list of questions may be helpful.

The questions to be asked here are the same as in Screening but, now, at the Scoping stage it is important that as much information as possible is provided on why the effect is considered likely to be significant, rather than a simple “yes/no” answer.

| No. | Question to be considered | Yes/No | Explanation of answer |
|-----|---|--------|-----------------------|
| 1 | Will there be a large change in environmental conditions? | | |
| 2 | Will new features be out-of-scale with the existing environment? | | |
| 3 | Will the effect be unusual in the area or particularly complex? | | |
| 4 | Will the effect extend over a large area? | | |
| 5 | Will there be any potential for trans-boundary impact? | | |
| 6 | Will many people be affected? | | |
| 7 | Will many receptors of other types (fauna and flora, businesses, facilities) be affected? | | |
| 8 | Will valuable or scarce features or resources be affected? | | |
| 9 | Is there a risk that environmental standards will be breached? | | |
| 10 | Is there a risk that protected sites, areas, or features will be affected? | | |
| 11 | Is there a high probability of the effect occurring? | | |
| 12 | Will the effect continue for a long time? | | |
| 13 | Will the effect be permanent rather than temporary? | | |
| 14 | Will the impact be continuous rather than intermittent? | | |
| 15 | If it is intermittent will it be frequent rather than rare? | | |
| 16 | Will the impact be irreversible? | | |
| 17 | Will it be difficult to avoid, or reduce or repair or compensate for the effect? | | |

Annex 2.C Checklist Of Potential Alternatives And Mitigation Measures

One aim of Scoping is to identify alternatives and mitigation measures which it may be appropriate for the developer to consider in finalising the project proposals.

The following checklist provides examples of the types of alternatives and measures which may be available and which could reduce the environmental impact of the project.

The Law (and the Directive) do not require the developer to always consider alternatives, but where he does so, he must provide an outline of the main alternatives studied and an indication of the main reasons for his choice, taking into account the environmental effects.

However, it is generally considered good practice to give some consideration to whether there are any feasible alternatives to a project which ought to be considered.

If any alternatives are considered the Law requires the developer to describe them in the Profound EIA Report and to explain their reasons for choosing the proposed project.

Types of alternatives and mitigating measures to be considered

1. Measures to manage demand for goods or services
2. Measures to conserve or reduce wastage of resources
3. Different approaches to meeting demand
4. Locations or routes
5. Processes or technologies
6. Working methods
7. Site plans and layouts
8. Design of structures
9. Types and sources of materials
10. Product specifications
11. Timetable for construction, operation and decommissioning including any phasing of the project
12. Start and finish dates
13. Size of the site or facility
14. Level of production
15. Responsibilities for implementation
16. Pollution controls
17. Waste disposal arrangements including recycling, recovery, reuse and final disposal
18. Access arrangements and routes for traffic to and from the site
19. Ancillary facilities
20. Management methods and systems
21. Environmental management responsibilities and procedures
22. Employment and staff training
23. Monitoring and contingency plans
24. Decommissioning arrangements, site restoration and after-use
25. Do Nothing or Do Minimum

Annex 3. Checklist Of Matters To Be Considered For Inclusion In A Profound EIA Report

This Checklist is intended as a guide to the subjects that need to be considered in the course of preparing a Profound EIA Report. As such, it may also be useful during and at the end of the scoping process.

It is unlikely that each and every one of the items in this Checklist will be relevant to any one project: this is something that will have been determined at the scoping stage.

The environmental effects of a project during its construction and commissioning stages should be considered separately from the effects arising whilst it is operational.

Where the operational life of a project is expected to be limited, the effects of decommissioning or rehabilitating the land should also be considered separately.

| No | Subject | |
|----------|--|--|
| 1 | Introduction | |
| 1.1 | Name and address of the developer | |
| 1.2 | Juridical status of the developer | |
| 1.3 | Juridical status of the proposed project | |
| 1.4 | Address and location of the proposed project | |
| 1.5 | Information on the type of project | |
| 1.6 | Information on the design and size of the project | |
| 1.7 | Name of the (main) expert who prepared the Profound EIA Report | |
| 1.8 | Number or proof of EIA Certificate of the expert | |
| | | |
| 2 | Information describing the project | |
| 2.1 | Purpose and physical characteristics of the project, including details of proposed access and transport arrangements, and of numbers to be employed and where they will come from. | |
| 2.2 | Land use requirements and other physical features of the project: | |
| | a. during construction; | |
| | b. when operational; | |
| | c. after use has ceased (where appropriate). | |
| 2.3 | Production processes and operational features of the project: | |
| | a. type and quantities of raw materials, energy and other resources consumed; | |
| | b. residues and emissions by type, quantity, composition and strength including: | |

| No | Subject | |
|----------|---|--|
| | i. discharges to water; | |
| | ii. emissions to air; | |
| | iii. noise; | |
| | iv. vibration; | |
| | v. light; | |
| | vi. heat; | |
| | vii. radiation; | |
| | viii. deposits/ residues to land and soil; | |
| | ix. others. | |
| | | |
| 3 | Alternatives (where relevant) | |
| 3.1 | Main alternative sites considered, and reasons for final choice (where relevant) | |
| 3.2 | Main alternative processes considered, and reasons for final choice (where relevant) | |
| | | |
| 4 | Information describing the site and its environment | |
| | <i>Physical features</i> | |
| 4.1 | Population - proximity and numbers. | |
| 4.2 | Flora and fauna (including both habitats and species) -- in particular, protected species and their habitats. | |
| 4.3 | Soil: agricultural quality, geology and geomorphology. | |
| 4.4 | Water: aquifers, water courses, shoreline, including the type, quantity, composition and strength of any existing discharges. | |
| 4.5 | Air: climatic factors, air quality, etc. | |
| 4.6 | Architectural and historic heritage, archaeological sites and features, and other material assets. | |
| 4.7 | Landscape and topography. | |
| 4.8 | Recreational uses. | |
| 4.9 | Any other relevant environmental features. | |
| | <i>Policy framework</i> | |
| 4.10 | Where relevant, information on any relevant designated or protected: | |
| | i. Special Protected Areas | |
| | ii. Other conservation areas | |
| | iii. Parks | |
| | iv. Archaeological sites | |
| | v. Historical sites; | |
| | vi. Water protection zones. | |
| 4.11 | Information on relevant national policies | |
| 4.12 | Information on any relevant regional or local plans or programmes (including any approved or drafts) | |
| 4.13 | Reference should be made, where relevant, to any international designations (eg under the Ramsar Convention, Biodiversity Convention) | |
| | | |
| 5 | Assessment of effects | |
| | This should include direct and indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project. | |
| | <i>Effects on human beings, buildings and man-made features</i> | |
| 5.1 | Change in population arising from the project, and consequential | |

| No | Subject | |
|----------|---|--|
| | environment effects. | |
| 5.2 | Visual effects of the project on the surrounding area and landscape. | |
| 5.3 | Levels and effects of emissions from the project during normal operation. | |
| 5.4 | Levels and effects of noise from the project. | |
| 5.5 | Effects of the project on local roads and transport. | |
| 5.6 | Effects of the project on buildings, the architectural and historic heritage, archaeological features, and other human artefacts, e.g. through pollutants, visual intrusion, vibration. | |
| | <i>Effects on flora, fauna and geology</i> | |
| 5.7 | Loss of, and damage to, habitats and plant and animal species. | |
| 5.8 | Loss of, and damage to, geological, palaeontological and physiographic features. | |
| 5.9 | Other ecological consequences. | |
| | <i>Effects on land</i> | |
| 5.10 | Physical effects of the development, eg change in local topography, effect of earthmoving on stability, soil erosion, etc. | |
| 5.11 | Effects of chemical emissions and deposits on soil of site and surrounding land. | |
| 5.12 | Land use/resource effects: | |
| | i. quality and quantity of agricultural land to be taken; | |
| | ii. effects on mineral resources; | |
| | iii. effect on surrounding land uses including agriculture; | |
| | iv. waste disposal; | |
| | v. other alternative uses of the site, including the 'do nothing' option; | |
| | <i>Effects on water</i> | |
| 5.13 | Effects of project on drainage pattern in the area. | |
| 5.14 | Changes to other hydrographic characteristics, eg groundwater level, water courses, flow of underground water. | |
| 5.15 | Effects on coastal or estuarine hydrology. | |
| 5.16 | Effects of pollutants, waste, etc. on water quality. | |
| | <i>Effects on air and climate</i> | |
| 5.17 | Level and concentration of chemical emissions and their environmental effects. | |
| 5.18 | Particulate matter. | |
| 5.19 | Offensive odours. | |
| 5.20 | Any other climatic effects. | |
| | <i>Other indirect and secondary effects associated with the project</i> | |
| 5.21 | Effects from traffic (road, rail, air, water) related to the project. | |
| 5.22 | Effects arising from the extraction and consumption of materials, water, energy or other resources by the project. | |
| 5.23 | Effects of other development associated with the project, eg new roads, sewers, housing, power lines, pipe-lines, telecommunications, etc. | |
| 5.24 | Effects of association of the project with other existing or proposed development. | |
| 5.25 | Secondary effects resulting from the interaction of separate direct effects listed above. | |
| | | |
| 6 | Mitigating measures | |

| No | Subject | |
|-----------|--|--|
| 6.1 | Where significant adverse effects are identified, a description of the measures to be taken to avoid, reduce or remedy those effects, eg: | |
| | i. site planning; | |
| | ii. technical measures, eg: | |
| | a. process selection; | |
| | b. recycling; | |
| | c. pollution control and treatment; | |
| | d. containment (eg, bounding of storage vessels). | |
| | iii. aesthetic and ecological measures, eg: | |
| | a. mounding; | |
| | b. design, colour, etc; | |
| | c. landscaping; | |
| | d. tree plantings; | |
| | e. measures to preserve particular habitats or create alternative habitats; | |
| | f. recording of archaeological sites; | |
| | g. measures to safeguard historic buildings or sites. | |
| 6.2 | An assessment of the likely effectiveness of mitigating measures. | |
| 7 | Risk of accidents and hazardous projects | |
| 7.1 | When the proposed project involves materials that could be harmful to the environment (including people) in the event of an accident, the Profound EIA Report should include an indication of the preventive measures that will be taken so that such an occurrence is not likely to have a significant effect. This could, where appropriate, include reference to compliance with health and safety legislation. | |
| 7.2 | When the proposed project intends to keep or use hazardous substances, the Profound EIA Report should include information on the appropriate risk assessment | |
| 8 | Compensation or substitution | |
| | In case of priority encroachments on nature and landscape, the Profound EIA Report should include details of the compensation or substitution measures to be taken | |
| 9 | Difficulties | |
| | The Profound EIA Report should give an indication of any technical deficiencies or lack of know-how that were encountered in compiling the | |
| 10 | Non technical summary | |

Annex 4. Review Checklist of a Profound EIA Report³

This Checklist is designed to help the authorities (especially the Ministry) in reviewing the quality of the Profound EIA Report to check its adequacy for decision making and consultation.

It may also therefore be helpful to the developer in preparing the Report as a check to ensure that the information provided in the Report is likely to be adequate.

The Checklist is organised in seven sections:

1. Description of the project
2. Alternatives
3. Description of the environment likely to be affected by the project
4. Description of the likely significant effects of the project
5. Description of Mitigating Measures
6. Non Technical Summary
7. Quality of presentation.

There are a number of questions to be answers within each section.

At the end of each section of the checklist it will be necessary to consider whether there are any additional questions that should be added to that section, because of any special features of the project which may mean that some types of information which is relevant has not yet been considered.

Instructions for use

1. First decide for each question, whether that question is relevant to the specific project. If so answer "yes" in column 2. If not, answer "no".
2. If the question is identified as relevant, it will then be necessary to review the Profound EIA Report in more detail in order to decide whether (for that question) the information provided is sufficient for decision-making. If so answer "yes" in column 3. If not, answer "no".
3. In considering whether the information is sufficient for decision-making, it may be necessary to consider whether there are any gaps or omissions in the information; and whether those gaps or omissions are vital to the decision-making process. If they are not vital, then it may not be necessary to request additional information on that topic (this may avoid unnecessary delay in the process). The factors that may need to be considered here include:

³ These Checklists are taken from the European Commission Guidance on EIA; EIS Review, June 2001

- a. The legal requirements of the Law: is this information something that “has” to be provided, or “may” be provided if relevant to the project
 - b. The scale and complexity of the project
 - c. The sensitivity of the receiving environment
 - d. The views of the public and the other authorities consulted about the project
 - e. Any level of controversy about the project.
4. If the answer was “no”, it will then be necessary to consider what additional information is required. This should be noted in column 4. It may also be useful at this stage to also make a note here of any suggestions on how or where the developer may find or obtain this information.

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|---|---|---------------------|---------------------|---|
| 1. Description of the project | | | | |
| <i>The objectives and physical characteristics of the project</i> | | | | |
| 1.1 | Is the need for the project explained? | | | |
| 1.2 | Are the objectives of the project explained? | | | |
| 1.3 | Is the programme for implementation of the project described, detailing the estimated length of time and start and finish 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) | | | |
| 1.4 | Are all the main components of the project described? (See Annex 2.A.1 Scoping Checklist of Project Characteristics) | | | |
| 1.5 | Is the location of each project component identified, using maps, plans and diagrams as necessary? | | | |
| 1.6 | Is the layout of the site (or sites) occupied by the project described? (This should include, as necessary, ground levels, buildings, other physical structures, underground works, coastal works, storage facilities, | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--------------------------------|--|---------------------|---------------------|--|
| | water features, planting, access corridors, boundaries) | | | |
| 1.7 | For linear projects, are the route corridor, the vertical and horizontal alignment and any tunnelling and earthworks described? | | | |
| 1.8 | Are the activities involved in construction of the project all described? | | | |
| 1.9 | Are the activities involved in operation of the project all described? | | | |
| 1.10 | Are the activities involved in decommissioning the project all described? (This should include, as necessary, closure, dismantling, demolition, clearance, site restoration, site re-use etc) | | | |
| 1.11 | Are any additional services required for the project all described? (e.g. transport access, water, sewerage, waste disposal, electricity, telecommunications) | | | |
| 1.12 | Are any additional developments required for the project all described? (e.g. roads, harbours, power lines, pipelines) | | | |
| 1.13 | Are any developments likely to occur as a consequence of the project identified? (e.g. new housing, roads, water or sewerage infrastructure, aggregate extraction) | | | |
| 1.14 | Are any existing activities which will alter or cease as a consequence of the project identified? | | | |
| 1.15 | Are any other existing or planned developments with which the project could have cumulative effects identified? | | | |
| <i>The size of the project</i> | | | | |
| 1.16 | Is the area of land occupied by | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|------|---|---------------------|---------------------|--|
| | each of the permanent project components quantified and shown on a scaled map? (including any associated access arrangements, landscaping and ancillary facilities) | | | |
| 1.17 | Is the area of land required temporarily for construction quantified and mapped? | | | |
| 1.18 | Is the reinstatement/rehabilitation and after-use of land occupied temporarily for operation of the project described? (e.g. land used for mining or quarrying) | | | |
| 1.19 | 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 or chimneys, the flow or depth of water) | | | |
| 1.20 | 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) | | | |
| 1.21 | For urban or similar development projects, are the numbers and other characteristics of new populations or business communities described? | | | |
| 1.22 | For projects involving the displacement of people or businesses, are the numbers and other characteristics of those displaced described? | | | |
| 1.23 | For new transport infrastructure projects or for projects generating substantial traffic flows, is the type, volume, | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--|---|---------------------|---------------------|--|
| | temporal pattern and geographical distribution of new traffic generated or diverted as a consequence of the project described? | | | |
| <i>Production processes and resources used</i> | | | | |
| 1.24 | 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) | | | |
| 1.25 | 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)) | | | |
| 1.26 | Are the types and quantities of raw materials and energy needed for construction discussed? | | | |
| 1.27 | Are the types and quantities of raw materials and energy needed for operation discussed? | | | |
| 1.28 | Are the environmental implications of the sourcing of raw materials discussed? | | | |
| 1.28 | Is efficiency in use of energy and raw materials discussed? | | | |
| 1.29 | Are any hazardous materials used, stored, handled or produced by the project identified and quantified – during construction? | | | |
| 1.30 | Are any hazardous materials used, stored, handled or produced by the project identified and quantified – during operation? | | | |
| | Are any hazardous materials used, stored, handled or produced by the project identified and quantified – during | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|------|---|---------------------|---------------------|--|
| | decommissioning? | | | |
| 1.31 | Are the transport (e.g. by road, rail or sea) of raw materials to the project and the number of traffic movements involved discussed – during construction? | | | |
| 1.32 | Are the transport (e.g. by road, rail or sea) of raw materials to the project and the number of traffic movements involved discussed – during operation? | | | |
| 1.33 | Are the transport (e.g. by road, rail or sea) of raw materials to the project and the number of traffic movements involved discussed – during decommissioning? | | | |
| 1.34 | Is employment created or lost as a result of the project discussed – during construction? | | | |
| 1.35 | Is employment created or lost as a result of the project discussed – during operation? | | | |
| 1.36 | Is employment created or lost as a result of the project discussed – during decommissioning? | | | |
| 1.37 | Are the access arrangements and the number of traffic movements involved in bringing workers and visitors to the project estimated – during construction? | | | |
| 1.38 | Are the access arrangements and the number of traffic movements involved in bringing workers and visitors to the project estimated – during operation? | | | |
| 1.39 | Are the access arrangements and the number of traffic movements involved in bringing workers and visitors to the project estimated – during decommissioning? | | | |
| 1.40 | Is the housing and provision of services for any temporary or permanent employees for the project discussed? (only relevant for projects requiring migration of a substantial new workforce into | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|-------------------------------|--|---------------------|---------------------|--|
| | the area for either construction or the long term) | | | |
| <i>Residues and emissions</i> | | | | |
| 1.41 | Are the types and quantities of solid waste generated by the project identified – during construction? | | | |
| 1.42 | Are the types and quantities of solid waste generated by the project identified – during operation? | | | |
| 1.43 | Are the types and quantities of solid waste generated by the project identified – during decommissioning? | | | |
| 1.44 | Is the composition and toxicity or other hazards of all solid wastes produced by the project discussed? | | | |
| 1.45 | Are the methods for collecting, storing, treating, transporting and finally disposing of these solid wastes described? | | | |
| 1.46 | Are the locations for final disposal of all solid wastes discussed? | | | |
| 1.47 | Are the types and quantities of liquid effluents generated by the project identified – during construction? | | | |
| 1.48 | Are the types and quantities of liquid effluents generated by the project identified – during operation? | | | |
| 1.49 | Are the types and quantities of liquid effluents generated by the project identified – during decommissioning? | | | |
| 1.50 | Is the composition and toxicity or other hazards of all liquid effluents produced by the project discussed? | | | |
| 1.51 | Are the methods for collecting, storing, treating, transporting and finally disposing of these liquid effluents described? | | | |
| 1.52 | Are the locations for discharge of all discharges to surface waters | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|------|---|---------------------|---------------------|--|
| | identified and the characteristics of the discharges identified? (e.g. length of outflow pipe, velocity and temperature of release) | | | |
| 1.53 | Are the locations for final disposal of all liquid effluents discussed? | | | |
| 1.54 | Are the types and quantities of gaseous and particulate emissions generated by the project identified – during construction? | | | |
| 1.55 | Are the types and quantities of gaseous and particulate emissions generated by the project identified – during operation? | | | |
| 1.56 | Are the types and quantities of gaseous and particulate emissions generated by the project identified – during decommissioning? | | | |
| 1.57 | Is the composition and toxicity or other hazards of all emissions to air produce by the project discussed? | | | |
| 1.58 | Are the methods for collecting, treating and finally discharging these emissions to air described? | | | |
| 1.59 | 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) | | | |
| 1.60 | Is the potential for resource recovery from wastes and residues discussed? (including re-use, recycling or energy recovery from solid waste and liquid effluents) | | | |
| 1.61 | Are any sources of noise, heat, light or electromagnetic radiation from the project identified and quantified? (including equipment, processes, construction works, traffic, lighting, etc) | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--|---|---------------------|---------------------|--|
| 1.62 | Are the methods for estimating the quantities and composition of all residues and emissions identified and any difficulties discussed? | | | |
| 1.63 | Is the uncertainty attached to estimates of residues and emissions discussed? | | | |
| <i>Risks of accidents and hazards</i> | | | | |
| 1.64 | Are any risks associated with the project discussed: | | | |
| | a. risks from handling of hazardous materials | | | |
| | b. risks from spills fire, explosion | | | |
| | c. risks of traffic accidents | | | |
| | d. risks from breakdown or failure of processes or facilities | | | |
| | e. risks from exposure of the project to natural disasters | | | |
| 1.65 | Are measures to prevent and respond to accidents and abnormal events described? (eg preventive measures, training, contingency plans, emergency plans, etc) | | | |
| <i>Any other questions on the Description of the project</i> | | | | |
| | | | | |
| 2. Consideration of alternatives | | | | |
| 2.1 | Are the alternatives which have been considered described? | | | |
| 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 project explained, including any environmental reasons for the choice? | | | |
| 2.5 | Are the main environmental effects of the alternatives compared with those of the project? | | | |
| <i>Any other questions on Consideration of alternatives</i> | | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--------------------------------------|---|---------------------|---------------------|--|
| 3. 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 – if the water environment may be affected by the project? (including running and static surface waters, groundwaters, estuaries, coastal waters and the sea and including run off and drainage. | | | |
| 3.7 | Are the hydrology, water quality and use of any water resources | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|------|--|---------------------|---------------------|--|
| | 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 if the air quality may be affected by the project? | | | |
| 3.9 | Is the existing noise climate described – if the acoustic environment may be affected by the project? | | | |
| 3.10 | Is the existing situation regarding light, heat and electromagnetic radiation described – if these aspects of the environment may 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 etc) | | | |
| 3.12 | Are any locations or features of archaeological, historic, architectural or other community or cultural importance in the area that may be affected by 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? | | | |
| 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, | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--|--|---------------------|---------------------|--|
| | described? (i.e. the 'no project situation) | | | |
| <i>Data collection and survey methods</i> | | | | |
| 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 institutions etc 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 characterize 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? | | | |
| <i>Any other questions on the Description of the Environment</i> | | | | |
| | | | | |
| 4. Description of the likely significant effects of the project | | | | |
| <i>Scoping of effects</i> | | | | |
| 4.1 | Is the process by which the scope of the Profound EIA Report was defined described? (See Annex 2 on scoping) | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|-------------------------------------|--|---------------------|---------------------|--|
| 4.2 | Where the Ministry gave a preliminary opinion on scope, has this been followed? | | | |
| 4.3 | Is it evident that a systematic approach to scoping was adopted? | | | |
| 4.4 | If there has been any consultation during scoping, has this been described? | | | |
| 4.5 | If there has been any consultation during scoping, are the comments resulting from consultation presented? | | | |
| <i>Prediction of direct effects</i> | | | | |
| 4.6 | Are direct, primary effects on land uses, people and property described, and where appropriate, quantified? | | | |
| 4.7 | Are direct, primary effects on geological features and characteristics of soils described and where appropriate quantified? | | | |
| 4.8 | Are direct, primary effects on fauna and flora and habitats described and where appropriate quantified? | | | |
| 4.9 | Are direct, primary effects on the hydrology and water quality of water features described and where appropriate quantified? | | | |
| 4.10 | Are direct, primary effects on uses of the water environment described and where appropriate quantified? | | | |
| 4.11 | Are direct, primary effects on air quality and climatic conditions described and where appropriate quantified? | | | |
| 4.12 | Are direct, primary effects on the acoustic environment (noise or vibration) described and where appropriate quantified? | | | |
| 4.13 | Are direct, primary effects on heat, light or electromagnetic radiation described and where appropriate quantified? | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--|--|---------------------|---------------------|--|
| 4.14 | Are direct, primary effects on material assets and depletion of non-renewable natural resources (e.g. fossil fuels, minerals) described? | | | |
| 4.15 | Are direct, primary effects on locations or features of cultural importance described? | | | |
| 4.16 | Are direct, primary effects on the quality of the landscape and on views and viewpoints described and where appropriate illustrated? | | | |
| 4.17 | Are direct, primary effects on demography, social and socio-economic condition in the area described and where appropriate quantified? | | | |
| <i>Prediction of indirect, secondary, cumulative, short-term, medium-term, long-term, permanent, temporary effects</i> | | | | |
| 4.18 | 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) | | | |
| 4.19 | 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 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) | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|------|---|---------------------|---------------------|--|
| 4.20 | 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). | | | |
| 4.21 | Are temporary, short term effects caused during construction or during time limited phases of project operation or decommissioning described? | | | |
| 4.22 | Are medium term effects caused during construction or during time limited phases of project operation or decommissioning described? | | | |
| 4.23 | 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? | | | |
| 4.24 | Are permanent effects on the environment caused by construction, operation or decommissioning of the project described? | | | |
| 4.25 | 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? | | | |
| 4.26 | 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) | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|---|--|---------------------|---------------------|--|
| 4.27 | Are the geographic extent, duration, frequency, reversibility and probability of occurrence of each effect identified as appropriate? | | | |
| <i>Prediction of effects on human health and sustainable development issues</i> | | | | |
| 4.28 | 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) | | | |
| 4.29 | Are impacts on issues such as biodiversity, global climate change and sustainable development discussed where appropriate? | | | |
| <i>Evaluation of the significance of effects</i> | | | | |
| 4.30 | 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? | | | |
| 4.31 | Where effects are evaluated against legal standards or requirements, are appropriate local, national or international standards used and relevant guidance followed? | | | |
| 4.32 | Are positive effects on the environment described as well as negative effects? | | | |
| 4.33 | Is the significance of each effect clearly explained? | | | |
| <i>Impact assessment methods</i> | | | | |
| 4.34 | Are methods used to predict effects described and are the | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|---|---|---------------------|---------------------|--|
| | reasons for their choice, any difficulties encountered and uncertainties in the results discussed? | | | |
| 4.35 | Where there is uncertainty about the precise details of the project and its impact on the environment, are worst case predictions described? | | | |
| 4.36 | 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? | | | |
| 4.37 | Is the basis for evaluating the significance or importance of impacts clearly described? | | | |
| 4.38 | Are impacts described on the basis that all proposed mitigation has been implemented -i.e. are residual impacts described? | | | |
| 4.39 | Is the level of treatment of each effect appropriate to its importance for the decision? Does the discussion focus on the key issues and avoid irrelevant or unnecessary information? | | | |
| 4.40 | Is appropriate emphasis given to the most severe, adverse effects of the project with lesser emphasis given to less significant effects? | | | |
| <i>Other questions relevant to the Description of Effects</i> | | | | |
| | | | | |
| 5. Description of mitigation | | | | |
| 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 | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--|---|---------------------|---------------------|--|
| | 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 is it 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 Developer has 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? | | | |
| <i>Other questions relevant to the Description of Mitigation</i> | | | | |
| | | | | |
| 6. Non technical Summary | | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--|--|---------------------|---------------------|--|
| 6.1 | Does the Profound EIA Report 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 provide an overview of the approach to the assessment? | | | |
| 6.5 | Is the Summary written in non-technical language, avoiding technical terms, detailed data and scientific discussion? | | | |
| 6.6 | Would the Summary be comprehensible to an average member of the public? | | | |
| <i>Other questions relevant to the Non Technical Summary</i> | | | | |
| | | | | |
| 7. Quality of presentation | | | | |
| 7.1 | Is the Profound EIA Report information available in one or more clearly defined documents? | | | |
| 7.2 | Is the document(s) logically organised and clearly structured so that the reader can locate information easily? | | | |
| 7.3 | Is there a table of contents at the beginning of the document(s)? | | | |
| 7.4 | Is there a clear description of the process which has been followed? | | | |
| 7.5 | Is the presentation comprehensive but concise, avoiding irrelevant data and information? | | | |
| 7.6 | Does the presentation make effective use of tables, figures, maps, photographs and other graphics? | | | |
| 7.7 | Does the presentation make | | | |

| No. | Question | Relevant? Yes/No | Adequate? Yes/No | What additional information is needed? |
|--|---|---------------------|---------------------|--|
| | effective use of annexes or appendices to present detailed data not essential to understanding the main text? | | | |
| 7.8 | Are all analyses and conclusions adequately supported with data and evidence? | | | |
| 7.9 | Are all sources of data properly referenced? | | | |
| 7.10 | Is consistent terminology used throughout the document(s)? | | | |
| 7.11 | Does it read as a single document with cross referencing between sections used to help the reader navigate through the document(s)? | | | |
| 7.12 | Is the presentation of information fair and as far as possible impartial and objective? | | | |
| <i>Other questions relevant to the Quality of Presentation</i> | | | | |
| | | | | |