

**Standard Format**

***INSTRUCTIONS TO THE CONSULTANTS***

*The standard Terms of Reference is to be modified for each project by the Consultant.*

*The modified Terms of reference is to be returned to the Town and Country Planning Department along with the scoping study for approval.*

*Under each of these headings, a list of key words and explanatory notes is given to indicate the topics to be handled. You will need to tailor each of these lists to the specific requirements of the proposed project.*

## Impact Assessment Terms of Reference

### **1. Environmental Impact Assessment Study background**

The Physical Planning Act Section 26 requires an Impact Assessment (EIA) study to be carried out in preparation of (***state the name of the proposed project***)

Review of environmental issues during programming and environmental screening of the proposal has indicated that further investigations are required with regard to (***state the specific environmental concerns, if known***).

The project is described as follows (***insert a short description to cover following points***):

- *Proposed location and physical presence of the project including a Hazard Vulnerability Assessment and identification of potential risks and how those would be mitigated*
- *Purpose of and rationale for the project, including key decision-making factors in project selection – economic, social and environmental;*
- *Proposed project description – project components, key activities and processes, project phasing and duration, and operational requirements;*
- *Proposed project inputs and outputs in terms of resources;*
- *Interaction between project activities and external factors such as other projects and donor agency work as well as other studies being carried out in conjunction with the EIA such as a feasibility study, preliminary design work, gender studies, economic, or socio-economic studies.*

- *Alternatives to the project design identified during consultations with the general public, regulatory authorities and special interest groups during project identification and prefeasibility studies and preparatory discussions with partner country;*
- *National policy and legislation, relevant regional or international conventions and treaties, relevant guidelines and standards;*

## **2. Study objective**

The Impact Assessment will provide decision-makers in the Planning Authority with sufficient information to justify acceptance, modification or rejection of the project for implementation. It will also provide the basis for guiding subsequent actions, which will ensure that the project is carried out with consideration of the impact issues identified.

## **3. Study results**

The EIA study will deliver the following:

- A scoping study to identify the physical limits of the proposed project study area and the time frame for the study, to undertake initial stakeholder consultation, to identify key potential risks and the types and levels of impacts to be assessed and to select alternatives for consideration. The study should also indicate the availability of relevant baseline data and identification of outstanding data to support the project;
- A description of existing environmental, physical and social conditions and trends focused on those aspects potentially affected by the proposals;
- A detailed assessment of the potential significant impacts and benefits associated with the project and of any measures to prevent or reduce potential risks and/or to enhance potential benefits of the proposed project, the financial cost of such measures, monitoring indicators and criteria, and an evaluation of any residual effects;
- A cost/benefit analysis including an environmental economic analysis of mitigation measures and residual impacts. Where full quantification cannot be undertaken satisfactorily, clear evaluation based on relative values for comparison of options or use of non-monetary criteria may be acceptable;
- Recommendations on the most appropriate actions:

-to minimise potential harmful impacts and maximise benefits, realise enhancements including consideration of institutional capacity and training needs that can be addressed as part of the project.

-on any actions that need to be taken to ensure that environmental aspects are incorporated into other project assessments/project stages;

-on actions complementary to the project that are needed to support the environmental sustainability of the project such as the need for institutional capacity building and training;

- Draft environmental management plan incorporating all of the above

#### **4. Issues to be studied**

##### **a) Scope of the IA**

*The consultants are required to identify the physical limits of the study area, the type and level and significance of potential impacts to be assessed, the main concerns of key stakeholders, and the adequacy of information available. This scoping study should include, but not necessarily be limited to, the physical, biological, cultural, social, economic and health aspects in each of the project phases (design, construction, operation and decommissioning).*

##### **b) Project and associated activities**

The consultants are required to examine the overall project proposal in order to identify in detail those aspects likely to have an impact. This investigation should include, but not necessarily be limited to, the following aspects:

- Project purpose, location, general layout, staffing, size, capacity phasing, life cycle and duration;
- Support and associated activities and services, required for the project.
- Materials and resources required such as energy consumption
- Residues and emissions, discharges to water, air emissions, noise and vibration, odour emissions, light, heat and radiation emissions
- Solid waste production, storage, disposal and recycling
- Land-take requirements, access and transport.
- Utilities

##### **c) Alternatives to the project**

The consultants are required to examine alternatives to the project design, focusing on their impact. This investigation should include, but not necessarily be limited to, the following aspects:

- Any feasible alternatives to the project design as formulated, such as the project location, sources of materials, resources, technology and management;
- The 'no action' situation (no project) as a benchmark for predicting environmental conditions under the project;
- The consultants are required to describe the findings of any work or study undertaken to date (either by comparing potential options or selecting a preferred option such as previous option studies or preparatory assessments). This should include any issues identified during consultation with the general public, regulatory authorities, special interest groups and other key stakeholders during such studies related to the alternatives and proposed project. The reasoning for the selection of the proposed project compared to other potential options should be given;

The main alternatives defined, including the 'no action' scenario(s) are to form the basis for comparison with the proposed projects potential impacts - adverse and beneficial.

**d) Policy and legislative and planning framework**

The consultants are required to examine national policies and legislative and planning framework relevant to the project and to assess the extent to which the project is in line with these requirements. This investigation should include, but not necessarily be limited to, the following aspects:

- National environmental policy and legislation, planning and development control frameworks including protected areas and environmental quality standards with implications for the project, such as environmental protection, health and safety and land-use control and provisions for public participation;
- Regional and international agreements and conventions relevant to the project;
- Regulatory agencies responsible for environmental protection and planning, their resources and capacity to address the issues raised by the project;
- Legal requirements for formal consultation and public participation;
- Other funding agencies and NGOs operating in the project area and their likely influence on the project, and initiatives to improve institutional capacity and coordination.

**e) Views of key stakeholders including the public**

*(Modify as appropriate)*

*At the scoping study stage, the consultants are required to*

- *review any consultation that has already taken place with key stakeholders carried out during project preparation to assess the extent to which their views have been taken up in the proposals or need to be taken into account specifically with regard to potential impacts.*
- *undertake consultation with key stakeholders including public groups as part of the scoping stage. This should include identifying who the stakeholders are, identifying the main areas of concern, their views on the assessment approach and identifying relevant information sources.*

During the IA the consultants are required to:

- carry out consultations to obtain the views of the regulatory agencies; NGOs; and representatives of the general public and other stakeholder interest groups. Appropriate and recognised methods should be used to ensure both compliance with legal obligations on consultation and ensure that stakeholder views are identified and taken into account.

#### **f) Existing environmental conditions**

The consultants are required to analyse the existing environmental conditions, and the pressures and trend on the environment, as a basis for assessing the potential environmental effects of the project. Therefore, the analysis must focus on those aspects likely to be relevant to the project. This analysis should include where applicable, but not necessarily be limited to, the aspects listed below:

- **Physical environment** including climate/micro-climate, air quality and odour, coastal and oceanographic conditions, water quality and resources, noise and vibration, topography and soils, geology and hydrogeology
- **Natural Hazards Risks** *To evaluate and review the potential impacts of natural hazards including climate change on any project, the independent EIA expert or advisory panel should be skilled in natural hazard assessment and climate change modeling.* The assessment should include:
  - Prevalent hazards in project's zone of influence –
  - Frequency, distribution and magnitude
  - Climate scenarios; variability and change
  - Factors influencing hazard occurrence
  - Disaster History

Determine whether the hazards can be mitigated through siting, design, or construction and whether the residual risks to the site and the building are acceptable. All documentation supporting this determination is required to be submitted.

- **Biological conditions, biodiversity, ecology and nature conservation** including rare, endangered and protected ecosystems, habitats and species, species of commercial importance or with potential to become a nuisance or dangerous;
- **Socio-economic conditions and human health** including archaeology and cultural heritage, values and aspirations, recreational, landscape and visual aspects, socio-economic aspects (population, employment, income revenue), and land use, access/transportation, infrastructure facilities (power/fuel sources, water supply. Sewerage, flood control) agricultural development, mineral industry, tourism and other commerce and economic activity (formal and informal) and health aspects (public health). human health and access/transportation;

**g) Potential impacts of the project**

- The consultants are required to carry out a qualitative and **quantitative** analysis and evaluation of potential impacts of the project. This should cover impact prediction, identification of potential mitigation measures and determination of significance of effects. The analysis should cover but not necessarily be limited to, the following potential impacts: direct and indirect, temporary or permanent, reversible or irreversible, positive and negative, short and long-term, and cumulative. The analysis should cover potential impacts on the physical, biological, and human environment, as described in section f). Impacts on different groups and sectors of society should be highlighted. The assessment should include an economic analysis of environmental costs and benefits including environmental cost, residual impacts and mitigation measures.
- The consultants are required to assess the levels of uncertainty associated with the potential significant impacts and consider potential risks associated with the project. This should include assessment of the likelihood of significant adverse effects and adequacy of response to the effects if they occur. Three aspects should be considered:
  - The seriousness of the consequences
  - The probability or likelihood of the effect occurring
  - The ability to manage the risk

Issues should cover as a minimum, accidents or natural disasters; effectiveness of mitigation measures; compliance with current and pending regulations; exposure to environmental liabilities and adverse public reaction (local, national and international). The consultants are required to select an appropriate method to assess and present the comparative risks.

- The consultants are required to state any preconditions and assumptions made in the prediction and assessment of the potential risks and benefits and to highlight areas where information is deficient.

**h) Potential measures to mitigate adverse impacts**

The consultants are required to carry out an evaluation and comparison of the options to avoid, remedy or reduce potential significant adverse effects to acceptable levels, and consider the role of compensatory measures where mitigation is not feasible. The consultants are required to provide indicative economic and/or financial costs for these measures. The consultants are required to highlight any significant residual environmental effects likely to remain after mitigation has been applied. They are required to ensure that these residual effects are considered in the comparative analysis of alternative options and the analysis of economic cost of environmental effects. Mitigation can include but not necessarily be limited to:

- *Modification of the project design in terms of scale, size and appearance;*
- *Pollution abatement technology to be applied;*
- *On and off-site works to reduce impacts;*
- *Landscape/habitat creation schemes;*
- *Emission control mechanisms;*
- *Traffic management schemes;*
- *Risk management schemes;*
- *Project construction, operational and decommissioning management and monitoring schemes.*

**i) Potential measures to enhance environmental benefits**

The consultants are required to identify feasible and cost-effective options to enhance environmental benefits associated with the project, including aspects that will improve the project's contribution to sustainable development, and to evaluate and compare the overall benefits. This will include but not necessarily be limited to:

- conservation or improvement of natural or built assets such as biodiversity, habitats and historical features;
- reduction of energy consumption and/ or promoting renewable energy;
- reduction of water consumption and improve water quality;
- reduction of pollution in the form of noise, air, land and water;
- use of derelict land and/or former contaminated land;
- reduction of waste disposal requirements through reduced production or improved reuse/recycling;

- education and training in environmental protection or management;
- increasing awareness of environmental issues;
- Improving capacity of institutions with responsibility for environmental management and protection.
- Measures to cop with climate change

**j) Environmental management capacity**

The consultants are required to assess the environmental management and monitoring needs of the project including availability of resources, skills and facilities and equipment.

**Monitoring requirements**

The consultants should specify the type of monitoring to be carried out unless already specified by government, when and how, who should be responsible and the purpose it is intended to achieve. This should be incorporated into the Environmental Management Plan. It should be made clear how the monitoring relates to key environmental indicators and objectives identified in the policy/ regulatory task.

**k) Environmental management plan**

The consultants should provide a draft Environmental Management Plan that should set out what actions need to be taken in each phase of the project to implement:

- mitigation measures;
- monitoring requirements;
- management requirement;
- training needs;
- institutional capacity building; and
- complementary activities.

The plan should indicate how, where, when and duration of the actions, who should be responsible, and reference standards or guidelines for carrying out the activities (such as national regulations, international standards, specific guidance documentation and protocols).

## **5. Work plan**

The work plan should include but not necessarily be limited to the following activities:

- Explanation of the methodology to be used to carry out the assessment
- Fact finding/data collection/surveys required to obtain or update data for the analysis

- Field visits and inspections
- Consultation meetings with regulatory authorities, groups representing public opinion, the public and decision makers
- Preparation of the draft Environmental Management Plan
- Preparation the draft and final IA study report.

On the basis of the proposed work plan and time schedule outlined in this Terms of Reference, the consultants must detail their work plan for the EIA study in their offer in the form of a Gantt chart. Modification of the chart can be made as the project progresses.

## **6. Expertise required**

The consultants must specify the qualifications and experience of each specialist to be assigned to the EIA study. For each specialist proposed, curriculum vitae must be provided of no more than four pages setting out the relevant qualifications and experience.

The consultants must specify how they intend to use local skills and how they will contribute to know how transfer through the project.

The consultant selection **must** be approved by the Planning Authority.

## **7. Reporting**

The study conclusions must be presented in the EIA report in the format given in Appendix 1. The underlying analysis is to be presented in appendices to this report.

The [**scoping study or confirmation of the scope of the EIA**] should be submitted as an interim report, 25 hard and digital copies are to be presented to the Town and Country Planning Department for comments.

The draft EIA report in 25 hard and digital copies is to be presented to the Town and Country Planning Department for comments. by [date]. Within 60 working days, comment on the draft report will be received from the relevant agencies.

The consultants will take account of these comments in preparing the final report (maximum of 15 pages for the scoping study; and 60 pages for the Final report, excluding diagrams and appendices). The final report in 25 (hard and digital) copies is to be submitted to the Town and Country Planning Department.

## **8. Time schedule**

The consultants should include the estimated time schedule in their report. Please adhere to the time conditions set out in the Physical Planning Act No. 15, 2004.

## **9. Conclusions and recommendations**

This section must include one of the three 'statements of impact' set out below

### **9.1 Statement of Impact**

- **The proposal will not have a significant environmental impact providing that the mitigation and monitoring measures recommended in the EIA are followed through. It is important that the mitigation/enhancement opportunities or measures recommended are incorporated into the proposal design.**

or

- **The proposal will have some significant environmental impacts, which cannot be feasibly mitigated. Therefore, it is recommended that modifications are made to the project design to avoid or minimise those impacts identified in the EIA. It is important that mitigation and monitoring measures recommended in the EIA are followed through. It should also be noted that residual impacts may occur and these should be highlighted in the financing of the proposal.**

or

- **The project/action will have a significant and unacceptable environmental impact irrespective of proposed mitigation and monitoring measures. Therefore, it is recommended that the project proposal is re-worked and alternatives re-assessed. It is important that the decision-maker considers the findings of this assessment in association with social, economic and financial analyses that have been undertaken for the proposal.**

### **9.2 Conclusions and recommendations**

This section must present a clear statement of the conclusions with regard to the potential environmental risks and benefits of the project, and the most appropriate means of mitigating the environmental impacts and enhancing the environmental benefits. It should include any recommendations on actions to be taken to ensure that environmental issues are adequately addressed in subsequent project preparation, implementation, monitoring and evaluation stages.

These conclusions and recommendations must be complete, yet concisely and clearly formulated, so that this section can be incorporated into the project documentation

## **10. Appendices**

- I. Format for Environmental Impact Assessment Report
- II. Scoping Study Report (if available)
- III. Supplementary data and information
- IV. Electronic submittal of all raw data collected in the assessment in a form suitable to government's information management system

### ***Technical appendices***

- I. Maps of the project area and other illustrative information not incorporated into the main report.
- II. Other technical information and data, as required.
- III. Minutes/summaries of consultation meetings
- IV. Draft environmental management plan.

### ***Administrative appendices***

- I. Study methodology/work plan (2–4 pages).
- II. Consultants' Itinerary (1–2 pages).
- III. List of persons/organisations consulted (1–2 pages).
- IV. List of documentation consulted (1–2 pages).
- V. Curricula vitae of the consultants (1 page per person).
- VI. Terms of Reference for the EIA.

## **11. Summary Impact Matrix**

A summary of all impacts, beneficial and adverse, that is required to be defined as outlined in Section 4 (g and h) must be compiled in a matrix. The matrix should include the information from the detailed assessment of the potential significant impacts and benefits associated with the each activity of the project and of any measures to prevent or reduce potential risks and/or

to enhance potential benefits of the proposed project. Please note all necessary references should be made to the relevant section within the EIA.

***INSTRUCTIONS TO THE CONSULTANTS***

***The EIA report must be organized using the same headings set out the Terms of Reference (chapters, sections and subsections).***