

Annex D

Technical Checklists on TM Annexes 11 & 20

Technical Checklist (on TM Annex 11) to Review an EIA Report

Purpose :

The purpose of this Technical Checklist is to assist the review of the EIA report to determine whether it meets the requirements of Annex 11 of the Technical Memorandum (TM) on EIA Process.

To record the compliance status of the submitted information :

For information already provided, put " ✓ ".

For information not provided at all, put " × ".

For information not applicable, put " n/a ".

Relevant sections must be stated for every bullet or item. Furthermore, a sub-row (with corresponding relevant sections) should be created for each relevant environmental aspect (for bullet points or items with multiple environmental aspects). For example, where relevant, sub-rows should be created for "noise impact - construction", "water quality - construction", "noise impact - operation", "water quality - operation", etc.

| Contents of an EIA Report | Status Yes No | Relevant Sections | Remarks |
|---|---|---|---------|
| <p><u>EXECUTIVE SUMMARY IN ENGLISH AND CHINESE</u></p> <ul style="list-style-type: none"> - Summary of main issues, findings, conclusions and recommendations | ✓ | standalone Executive Summary (both English & Chinese versions) | |
| <p><u>INTRODUCTION</u></p> <ul style="list-style-type: none"> - Background of the project - Purpose of the EIA study - The approach | <ul style="list-style-type: none"> ✓ ✓ ✓ | <ul style="list-style-type: none"> 1.1 1.2 1.3 | |
| <p><u>DESCRIPTION OF THE PROJECT</u></p> <ul style="list-style-type: none"> - Key project requirements - Site location and site history - Nature, scope and benefits of the project - Size or scale, shape and design of the project - Project timetable and phasing of the project - Means by which the project will be implemented - Any related projects - Type, scope, scale, frequency and duration of the construction, operational or decommissioning (if | <ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ n/a ✓ | <ul style="list-style-type: none"> 2.1 2.2 2.1 & 1.1 2.1 & 2.2 2.4 & Fig.2.1 2.5 2.1, 2.4, 2.5 & Fig.2.1 | |

| Contents of an EIA Report | Status Yes No | Relevant Sections | Remarks |
|--|--|--|----------------|
| relevant) activities - Background and history of the project, including considerations given to different options, and the project's different siting or alignment - Description of scenarios with or without the project | ✓ ✓ | 1.1 & 2.3 1.1 para 1 | |
| <u>ENVIRONMENTAL LEGISLATION, POLICIES, PLANS, STANDARDS AND CRITERIA</u> - Applicable environmental ordinances and regulations - Applicable government environmental policies and plans - Applicable environmental standards and criteria - Other references | ✓ ✓ ✓ n/a | 3.2, 4.2, 5.5 & 6.2 3.2, 4.2, 5.5 & 6.2 3.2, 3.4.3, 4.2, 5.5 & 6.2 | |
| <u>DESCRIPTION OF THE ENVIRONMENT</u> - Baseline environmental conditions - Environmental trends | ✓ ✓ | 3.4, 4.4, 5.6, 6.4 & 7.3 3.4, 4.4, 5.6, 6.4 & 7.3 | |
| <u>DESCRIPTION OF ASSESSMENT METHODOLOGIES</u> - Assessment methodologies, assumptions and criteria, including sample calculations and input and output files of a typical model run for all mathematical modelling | ✓ | 3.3, 4.3, 5.2, 6.3 & 7.2 | |
| <u>IDENTIFICATION OF ENVIRONMENTAL IMPACTS</u> - Potential environmental impacts including the types, characteristics and estimated quantities of emissions, discharges, wastes, potential risks, disturbances or displacement associated with the activities relating to the project during construction, operation and decommissioning phases - Description of resources or receivers which are vulnerable to change or environmental impacts | ✓ ✓ | 3.5.1, 4.1, 5.7, 6.5 & 7.4 3.4, 4.4, 5.2.5, 5.6, 6.4 & 7.3 | |
| <u>PREDICTION AND EVALUATION OF ENVIRONMENTAL IMPACTS</u> - Prediction of environmental impacts (including beneficial or adverse; direct or indirect; short term or long term; reversible or irreversible; transboundary; cumulative) - Evaluation of predicted environmental impacts against applicable environmental legislation, policies, plans, standards and criteria | ✓ ✓ | 3.4.3, 3.5.2, 4.5, 5.8, 5.9, 6.6 & 7.4 3.5.2, 4.5, 5.8, 5.9, 6.6 | |

| Contents of an EIA Report | Status Yes No | Relevant Sections | Remarks |
|---|--|------------------------------------|--|
| | | & 7.4 | |
| <u>MITIGATION OF ADVERSE ENVIRONMENTAL IMPACTS</u> - Measures to eliminate, reduce or remedy adverse environmental impacts | ✓ | 3.6, 4.6, 5.10, 6.7 & 7.5 | |
| <u>DEFINITION AND EVALUATION OF RESIDUAL ENVIRONMENTAL IMPACTS</u> - Definition and evaluation of net environmental impacts with mitigation measures in place | ✓ | 3.7, 5.11, 6.8 & 7.5 last para | Residual impact for EMFs is not applicable |
| <u>ENVIRONMENTAL MONITORING AND AUDIT</u> - Need for and scope of monitoring and audit - Environmental monitoring and audit requirements, if found to be necessary, and the related environmental monitoring and audit programme | ✓ ✓ | 8.2 8.2 | |
| <u>CONCLUSIONS AND RECOMMENDATIONS</u> | ✓ | 9 | |
| <u>SCHEDULE OF RECOMMENDED MITIGATION MEASURES</u> - A schedule of all mitigation measures recommended in the EIA report, listing out what the mitigation measures are, by whom, when, where and to what requirements, and including the key environmental monitoring and audit requirements | ✓ | 10 | |
| <u>APPENDIX</u> - | ✓ | Appendix A, Annexes A & B | |

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Technical Checklist (on TM Annex 20) to Review an EIA Report

Purpose :

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To record the compliance status of the submitted information :

For information already provided, put " ✓ ".

For information not provided at all, put " × ".

For information not applicable , put " n/a ".

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| TM Issues | Status | | Relevant Sections | Remarks |
|--|--------|----|-------------------|---------|
| | Yes | No | | |
| 1. General Approach | | | | |
| Organisation of the Information | | | | |
| 1.1 Is information logically arranged in sections ? | ✓ | | | |
| 1.2 Is the location of information identified in an index or table of contents ? | ✓ | | Page i | |
| 1.3 When information from external sources has been introduced, has a full reference to the source been included ? | ✓ | | REFERENCES | |
| Presentation of Information | | | | |
| 1.4 Has information and analysis been offered to support all conclusions drawn ? | ✓ | | | |
| 1.5 Has information and analysis been presented so as to be comprehensive to the non-specialist using maps, tables and graphical material as appropriate ? | ✓ | | | |
| 1.6 Are all the important data and results discussed in an integrated fashion within the information ? | ✓ | | | |
| 1.7 Has superfluous information (ie information not needed for the decision) been avoided ? | ✓ | | | |

| TM Issues | Status Yes No | Relevant Sections | Remarks |
|---|--|--------------------------|----------------|
| 1.8 Has the information been presented in a concise form with a consistent terminology and are there logical links between different sections ? | ✓ | | |
| Presentation of Information | | | |
| 1.9 Have prominence and emphasis been given to severe adverse impacts, to substantial environmental benefits, and to controversial issues ? | ✓ | 3.5, 5.8 & 5.9 | |
| 1.10 Is the information objective ? | ✓ | | |
| Public Concerns | | | |
| 1.11 Does the information identify and address the main concerns of the general public and special interest groups (clubs, societies etc) who may be affected by the project? | ✓ | 4.1 & 5.6 | |
| 1.12 Does the information take account of the main concerns of the relevant statutory or advisory bodies? | ✓ | 3.2, 4.2, 5.5 & 6.2 | |
| 2. Description of the Project | | | |
| Features of the Project | | | |
| 2.1 Are the purpose(s) and objectives of the project explained ? | ✓ | 1.1 | |
| 2.2 Are the nature and status of project decision(s), for which the EIA study is undertaken, clearly indicated ? | ✓ | 1.1 | |
| 2.3 Is the estimated duration of the construction phase, operational phase and, where appropriate, decommissioning phase given, together with the programme within these phases ? | ✓ | 2.4 & Fig.2.1 | |
| 2.4 Is the design and size of the project described, using diagrams, plans and/or maps as necessary ? | ✓ | Fig.1.1 & Fig.2.2 | |
| 2.5 Are the methods of construction described ? | ✓ | 2.5 | |
| 2.6 Are the nature and methods of production or other types of activity involved in operation of the project described ? | n/a | | |
| 2.7 Has the land taken up by the project site(s), construction sites, and any associated access arrangements, auxiliary facilities and landscaping areas, been clearly shown on a scaled map? | ✓ | 2.4 | |
| 2.8 For a linear project, has the land corridor, vertical | | | |

| TM Issues | Status Yes No | Relevant Sections | Remarks |
|---|--|--|--|
| <p>and horizontal alignment and need for tunnelling, and earthworks been described ?</p> <p>2.9 Have the uses to which the project will be put been described and the different land use areas demarcated ?</p> | <p>✓</p> <p>✓</p> | <p>2.4 & 2.5</p> <p>2.2</p> | |
| <p>Residues and Emissions</p> <p>2.10 Have the types and quantities of waste matter, energy (noise, vibration, light, heat, radiation etc) and residual materials generated during construction and operation of the project, and the rate at which these will be produced, been estimated ?</p> <p>2.11 Have the ways in which it is proposed to handle and/or treat these wastes and residual materials prior to release/disposal been indicated, together with the routes by which they will eventually be disposed of to the environment ?</p> <p>2.12 Have any special or hazardous wastes which will be produced been identified as such and the methods for their disposal been described, as regards their likely main environmental impacts?</p> <p>2.13 Have the means by which the quantities of residuals and wastes were estimated been indicated and has uncertainty been acknowledged and ranges provided where appropriate ?</p> | <p>✓</p> <p>✓</p> <p>n/a</p> <p>n/a</p> | <p>4.5</p> <p>4.6</p> | <p>assessment on waste matter is not required by the Brief</p> |
| <p>3. <u>Background and History of the Project</u></p> | | | |
| <p>3.1 Where appropriate does the information include reference to the consideration of the project's siting or alignment by the project proponent ?</p> <p>3.2 Are the reasons for selecting the proposed project or its siting and alignment, and the part environmental factors played in the selection, adequately described ?</p> <p>3.3 Have the main environmental impacts of different siting or alignment options been compared clearly and objectively with those of the proposed project and with the likely future environmental conditions in the absence of the project ?</p> | <p>✓</p> <p>✓</p> <p>✓</p> | <p>2.3</p> <p>1.1 & 2.3</p> <p>1.1 & 2.3</p> | |
| <p>4. <u>Description of the Environment</u></p> | | | |

| TM Issues | Status Yes No | Relevant Sections | Remarks |
|---|---|--|----------------|
| <p>Description of the Area Occupied by and Surrounding the Project</p> <p>4.1 Have the areas expected to be significantly affected by the various aspects of the project been indicated with the aid of suitable maps ?</p> <p>4.2 Have the land uses on the site(s) and in the surrounding areas been described ?</p> <p>4.3 Has the affected environment been defined broadly enough to include any potentially significant effects occurring away from the immediate areas of construction and operation ?</p> | <p>✓</p> <p>✓</p> <p>✓</p> | <p>Fig.3.1a-e</p> <p>3.4 & 5.6</p> <p>5.6</p> | |
| <p>Baseline Conditions</p> <p>4.4 Have the components of the environment potentially affected by the project been identified and described sufficiently for the prediction of impacts ?</p> <p>4.5 Were the methods used to investigate the affected environment appropriate to the size and complexity of the assessment task ?</p> <p>4.6 Has a prediction of the likely future environmental conditions in the absence of the project been developed ?</p> <p>4.7 Have existing technical data sources, including local records and studies carried out for environmental agencies and/or interest groups been searched ?</p> <p>4.8 Have local, regional and national plans and policies been reviewed and other data collected as necessary to predict future environmental conditions ?</p> <p>4.9 Have relevant departments and agencies holding information on baseline environmental conditions been approached ?</p> | <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> | <p>3.4, 4.4, 5.6, 6.4 & 7.3</p> <p>3.3, 4.3, 5.2, 6.3 & 7.2</p> <p>3.4, 4.4, 5.6, 6.4 & 7.3</p> <p>3.3, 4.3, 6.3 & 7.7.2</p> <p>3.2, 4.2, 5.5 & 6.2</p> <p>6.4 & 7.3</p> | |
| <p>5. <u>Description of Impacts</u></p> | | | |
| <p>5.1 Have the direct and indirect/secondary effects of constructing, operating and, where relevant, after use or decommissioning of the project been considered (including both positive and negative effects) ?</p> <p>5.2 Does the information include consideration of whether effects will arise as a result of "consequential" development ie whether additional development, which it would be difficult to resist, will be included in the area, leading to further environmental effects ? For a project with multiple</p> | <p>✓</p> <p>n/a</p> | <p>3.5, 4.5, 5.8, 5.9, 6.5, 6.6 & 7.4</p> | |

| TM Issues | Status Yes No | Relevant Sections | Remarks |
|---|---|--|--|
| <p>stages, are the impacts caused by overlapping of different stages considered and determined ?</p> <p>5.3 Have the above types of impacts been investigated in so far as they affect the following:</p> <ul style="list-style-type: none"> - air and climate; - water and soils; - noise; - landscape; - ecology; - historic and cultural heritage; - land use; - impacts on people and communities; - impacts on agriculture and fisheries activities. <p>5.4 If any of the above are not of concern in relation to the specific project and its location is this clearly stated in the information ?</p> | <p>n/a</p> <p>✓</p> <p>n/a</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>n/a</p> <p>n/a</p> <p>n/a</p> <p>✓</p> | <p>6</p> <p>5</p> <p>3</p> <p>7</p> <p>1.3</p> | <p>not required by the Brief</p> <p>not required by the Brief</p> <p>not required by the Brief ditto ditto</p> |
| <p>5.5 Is the investigation of each type of impact appropriate to its importance for the decision, avoiding unnecessary information and concentrating on the key issues ?</p> <p>5.6 Are impacts which may not be themselves significant, but which may contribute incrementally to a significant effect considered ?</p> <p>5.7 Does the information include a description of the methods/approaches used to identify impacts and the rationale for using them ?</p> <p>5.8 If the nature of the project is such that accidents are possible which might cause severe damage within the surrounding environment, has an assessment of the probability and likely consequences of such events been carried out and the main findings reported ?</p> | <p>✓</p> <p>n/a</p> <p>✓</p> <p>n/a</p> | <p>3.5, 4.5, 5.7, 5.8, 5.9, 6.5, 6.6 & 7.4</p> <p>3.3, 4.3, 5.2, 6.3 & 7.2</p> | |
| <p>Magnitude of Impacts</p> <p>5.9 Are impacts described in terms of the nature and magnitude of the change occurring and the nature (location, number, value, sensitivity) of the affected receiver ?</p> <p>5.10 Has the timescale over which the effects will occur been predicted such that it is clear whether impacts are short, medium or long term, temporary or permanent, reversible or irreversible?</p> | <p>✓</p> <p>✓</p> | <p>3.5, 4.5, 5.8, 5.9, 6.6 & 7.4</p> <p>3.5, 4.5, 5.8, 5.9, 6.6 & 7.4</p> | |

| TM Issues | Status Yes No | Relevant Sections | Remarks |
|---|--|--|--|
| data been introduced to justify the acceptance of the assumptions ? | | | |
| <p>Implementation of Mitigation Measures</p> <p>6.7 Have details of how the mitigation measures will be implemented and function over the time span for which they are necessary been presented ? Does the report list out clearly what mitigation measures would be implemented, by whom, when, where and to what requirements ? Is the responsibility for implementing the recommended mitigation measures clearly defined ?</p> | ✓ | 10 | |
| <p>Environmental Effects of Mitigation</p> <p>6.8 Have any adverse environmental effects of mitigation measures been investigated and described ?</p> <p>6.9 Has the potential for conflict between the benefits of mitigating measures and their adverse impacts been considered ?</p> | n/a | | no adverse environmental effects of mitigation measures are predicted ditto |
| 7. Evaluation of Residual Impacts | | | |
| <p>7.1 Have the available standards, assumptions and criteria which can be used to evaluate the impacts been discussed ?</p> <p>7.2 Have the predicted impacts been compared to the available standards and criteria ?</p> <p>7.3 Have the residual impacts, which are the net impacts with the mitigation measures in place, been described and evaluated against the available Government policies, standards and criteria ?</p> | ✓ ✓ ✓ | 6.9 6.9 6.9 | |
| <p>7.4 Have the residual impacts been discussed and evaluated in terms of the impact on the health and welfare of the local community and on the protection of environmental resources ?</p> <p>7.5 Have the magnitude, location and duration of the residual impacts been discussed in conjunction with the value, sensitivity and rarity of the resource ?</p> <p>7.6 Where there are no generally accepted standards or criteria for the evaluation of residual impacts, have alternative approaches been discussed and, if so, is a</p> | ✓ ✓ n/a | 3.7, 5.11, 6.8 & 7.5 3.7, 5.11, 6.8 & 7.5 | |

| TM Issues | Status Yes No | Relevant Sections | Remarks |
|--|--|---|---|
| <p>clear distinction made between fact, assumption and professional judgement ?</p> <p>7.7 Have the residual impacts, if any, arising from the implementation of the proposed mitigation measures, been considered ?</p> | n/a | | no residual impacts were predicted to arise from implementation of the proposed mitigation measures |
| 8. <u>Environmental Monitoring and Audit Proposals</u> | | | |
| <p>8.1 If impacts are uncertain, have monitoring arrangements been proposed to check the environmental impacts resulting from the implementation of the project and their conformity with the predictions made ?</p> <p>8.2 Does the scale of any proposed monitoring arrangements correspond to the potential scale and significance of deviations from expected impacts ?</p> <p>8.3 Is the need for and the scope of the monitoring and audit requirements defined in the report ?</p> <p>8.4 Does the report contain an Environmental Monitoring and Audit programme, as prescribed in Annex 21, if it is found to be needed ?</p> | <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> | <p>8.2</p> <p>EM&A Manual</p> <p>8.2</p> <p>EM&A Manual</p> | |
| 9. <u>Difficulties Compiling the Information</u> | | | |
| <p>9.1 Have any gaps in the required data been indicated and the means used to deal with them in the assessment been explained ?</p> <p>9.2 Have any difficulties in assembling or analysing the data needed to predict impacts been acknowledged and explained ?</p> | <p>n/a</p> <p>n/a</p> | | |
| 10. <u>Executive Summary</u> | | | |
| <p>10.1 Does the executive summary contain at least a brief description of the project and the environment, an account of the main mitigation measures to be implemented by the developer, and a description of</p> | ✓ | 2 & 3 | |

| TM Issues | Status Yes No | Relevant Sections | Remarks |
|---|----------------------------|-------------------------------------|---------|
| <p>any remaining or residual impacts ?</p> <p>10.2 Have technical jargons been avoided as far as possible in the executive summary ?</p> <p>10.3 Does the executive summary present the main findings of the assessment and cover all the main issues?</p> | <p>✓</p> <p>✓</p> | <p>Throughout the text</p> <p>3</p> | |
| <p>10.4 Does the executive summary include a brief explanation of the overall approach to the assessment ?</p> <p>10.5 Does the executive summary provide an indication of the confidence which can be placed in the results ?</p> <p>10.6 Is the executive summary presented in both English and Chinese ?</p> | <p>✓</p> <p>✓</p> <p>✓</p> | <p>1.3</p> <p>3</p> | |