

**Environmental Impact Assessment Ordinance, Cap.499
Guidance Note**

**Flexibility and Enforceability of Mitigation Measures
Proposed in an Environmental Impact Assessment Report**

(This guidance note supersedes EIAO Guidance Note No. 3/2002 with immediate effect)

Important Note :

The guidance note is intended for general reference only. You are advised to refer to and follow the requirements in the Environmental Impact Assessment Ordinance (Cap 499) and the Technical Memorandum on the Environmental Impact Assessment (EIA) Process. Each case has to be considered on individual merits. This guidance note serves to provide some good practices on EIA and was developed in consultation with the EIA Ordinance Users Liaison Groups and the Advisory Council on the Environment. This guidance note may be subject to revision without prior notice. You are advised to make reference to the guidance note current to the date. Any enquiry on this guidance note should be directed to the EIA Ordinance Register Office of EPD on 27th Floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong. (Telephone: 2835-1835, Faxline: 2147-0894), or through the EIA Ordinance web site (www.epd.gov.hk/eia)

1. Purpose

1.1 This guidance note is to provide EIA practitioners with guiding principles to assess the environmental performance and to present proposed mitigation measures in an Environmental Impact Assessment (EIA) report in order to facilitate flexibility for staged implementation of such measures under the environmental permit control.

2. Phasing

2.1 Mitigation measures being proposed in an EIA report can be implemented in phases. Under such circumstance, the following points should be observed.

Phased implementation of a designated project

2.1.1 Phased implementation of a designated project by incorporating mitigation measures should be clearly assessed and stated in an EIA report to allow for flexible implementation in different stages. Any uncertainty in this aspect should be clarified and properly dealt with at the initial design of a project and be documented in an EIA report. Mitigation measures shall include those measures being identified during the detailed design, contract preparation, construction and operation stages of a project. It should be noted that long term maintenance aspects should be addressed as part and parcel of the operation stage.

Impacts of Different Phases

2.1.2 Environmental impacts due to each phase of project implementation should be adequately assessed to match with mitigation measures being recommended for that phase. This can maximise the efficiency and effectiveness of mitigation measures once installed.

Timing

2.1.3 Timing for implementation of mitigation measures, whether in one go or in phases, should be clearly specified in an EIA report as far as practicable. For example, if an EIA report recommends that a temporary noise barrier will be installed to mitigate the construction noise impact of a particular section of a road project, the report should specify the time and location details as far as practicable.

Different Scenarios

2.1.4 In some cases, an environmental impact might vary under different stages/situations/scenarios of a project. A mitigation measure being found adequate to ameliorate a specific impact might not be sufficient to address the impact at another stage/situation/scenario. Different packages of mitigation measures can be developed in order to deal with different scenarios. It will certainly enhance flexibility of the EPD in exercising control through the environmental permit system if packages of measures have been adequately identified in an EIA report under different implementation scenarios. An assessment could build in extra flexibility by using “if-then” statements to link the scenario(s) and relevant mitigation measures, so as to expand different possible options for a project implementation.

3. Preventiveability, Flexibility and Enforceability

3.1 Irrespective of whether mitigation measures will be implemented in one go or in phases, a package of mitigation measures should be reasonable, practical and possess the following characteristics.

Preventiveability

3.1.1 The primary purpose of mitigation measures is to prevent/pre-empt environmental problems, and not just to rectify problems after their occurrence. Priority consideration should be given to avoid, pre-empt and prevent adverse environmental consequences.

Flexibility

3.1.2 As an EIA study is conducted in an early stage of project planning, changes are expected throughout a project life cycle. Flexible mitigation measure proposals being included in an EIA report would help to avoid unnecessary delay due to the need for further assessment.

3.1.3 Mitigation measures must be robust and credible. These measures might be scrutinized by members of the public when an EIA report is under public inspection.

Enforceability

3.1.4 Mitigation measures should be specified in accordance with paragraph 6.7 of Annex 20 of the Technical Memorandum on EIA Process. The enforceability of proposed measures should be checked against the following:

- (i) **What** mitigation measures will be implemented?
- (ii) **Who** will implement the measures?
- (iii) **When** will the measures be implemented?

- (iv) **Where** (i.e. at what locations) will the measures be implemented?
- (v) To **what** standards or requirements should these measures be implemented?

4. Implementation

4.1 Mitigation measures being proposed in an EIA report may be implemented through one or more of the following channels. The details are provided in Table 1.

Explicit mitigation measures in EIA Report

4.1.1 Mitigation measures should be adequately assessed and explicitly stated in an EIA report to facilitate future follow-up action during project implementation. A similar approach is expected to be adopted under the environmental permit system being enforced under the EIA Ordinance.

Situational description of mitigation measures in EIA Report

4.1.2 As described in paragraph 2.1.4 above, the use of “if-then” statements to extend flexibility of mitigation measures could be considered in an EIA report to facilitate phased or scenario implementation of a designated project. Such scenarios should be explicitly evaluated in an EIA report for approval. A similar approach is expected to be adopted for compliance under the environmental permit system.

Design Audit

4.1.3 In the case when information could only become available in subsequent design stages, a design audit mechanism can be adopted to audit subsequent proposal(s) and mitigation measures for meeting requirements under the Technical Memorandum of EIA Process. Under such circumstance, audit criteria should be clearly specified in an EIA report for approval. Thereafter, a design audit will be implemented to demonstrate environmental compliance under the environmental permit system.

Environmental Management System*

4.1.4 An environmental management system being certified to an internationally accepted standard would ensure that a proper system will be put in place by a project proponent to effectively implement the mitigation measures in an EIA Report. The system helps to reduce a likelihood of exceedance of environmental limits or violations of environmental permit conditions. It also provides a mechanism for a project proponent to voluntarily commit to achieve more than those recommended in the EIA Report.

4.1.5 Other options satisfying the EIAO criteria and the considerations in section 3 of this note may also be considered.

* "Environmental Management System is that part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy." (definition quoted from international standard ISO 14001).
For further guidance on setting up and implementation of EMS (to ISO 14001 standard), please visit EPD website at http://www.epd.gov.hk/epd/english/how_help/tools_ems/tools_ems.html.

Environmental Protection Department

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Table 1 : Some Approaches to Implement Environmental Mitigation Measures

No.	Options could be considered to implement proposed mitigation measures	Case in Point
1.	Explicit mitigation measures in the EIA report	□ The implementation of a noise barrier of a road project should possess the 5-W information with the clear dimensions of the barrier wall, in a clear location drawing.
2.	Situational description of mitigation measures in EIA report	□ The following noise mitigation measures are recommended for a new railway project: a) if operating with a 9-car train, then noise mitigation measure type A will be provided for; or, b) if operating with a 12-car train, then noise mitigation measure type B will be provided for; or.....
3.	Design Audit	□ Before operation of the Project, the Proponent shall carry out an audit to confirm that all the agreed environmental measures for the Project's operation have been fully implemented. The audit shall cover all measures recommended in the EIA reports. The result of the audit shall be documented in an Audit Report and submitted to the Director prior to operation of the Project. The Audit Report shall be certified by the Environmental Team Leader and verified by the Independent Environmental Checker as conforming to the findings and recommendations of the EIA report.
4.	Environmental Management System	□ The setting up of an EMS should conform with international system(s) widely acceptable in this field, such as ISO14001 or equivalent.
5.	Other Options	□ The proposed mitigation measures should meet the requirements in the EIAO and the TM.