
INFORMATION NOTE

The Mechanism of Environmental Impact Assessment in Selected Places

1. Introduction

1.1 This information note compares the mechanisms of environmental impact assessment (EIA) in overseas jurisdictions with the one in the Hong Kong Special Administrative Region (HKSAR). It aims to provide Members of the Legislative Council with information on the framework for the conduct of EIA in California of the United States of America (California), the Netherlands and Taiwan. California is selected for the study because it has established a mechanism for EIA since 1970. The Netherlands is chosen because it has an independent advisory commission for EIA. Taiwan is included because its level of economic development is comparable to that of HKSAR. The study of the experience of these places may serve as references for HKSAR.

2. Definition of Environmental Impact Assessment

2.1 EIA is a series of procedures with aims to identify the possible environmental impacts of a proposed activity, to explore ways to minimize the environmental impacts, and to determine whether or not the proposed activity should be allowed to proceed.

2.2 In general, the procedures for implementing EIA comprise:¹

- (a) screening – a procedure to determine which proposed activity should be subject to EIA;
- (b) scoping – a procedure to decide the coverage of and requirements for an EIA report;
- (c) preparation of an EIA report – a procedure to document, inter alia, findings of the environmental impacts of the proposed activity and the mitigation measures for the adverse environmental impacts;
- (d) review – a procedure to determine whether or not the EIA report provides a satisfactory assessment of the proposed activity and meets all the necessary requirements;

¹ International Association for Impact Assessment (1999), United Nations Environment Programme (2002) and Wood (2002).

- (e) decision-making – a procedure to approve, or approve with conditions, or reject the proposed activity; and
- (f) follow-up – a procedure to audit and monitor the environmental impact of the proposed activity.

3. California of the United States of America

Legislative framework

3.1 The *California Environmental Quality Act* (CEQA) and the *Guidelines for Implementation of the California Environmental Quality Act* (CEQA Guidelines) provide the legislative framework for EIA in California. While the former was enacted in 1970, the latter was released in 1972.²

3.2 Under CEQA, proposed activities which are undertaken or financially supported or involved granting of permission by a public agency³ and likely to cause a significant environmental impacts may require EIA. CEQA also lists out exemptions from EIA, such as emergency projects initiated as a result of a disaster and minor alterations of existing facilities.⁴

Enforcement agency

3.3 Under CEQA, there is no designated enforcement agency. The responsibility for ensuring compliance with CEQA falls on the public agency which undertakes, supports or approves the proposed activity. In the case of more than one public agency is involved, the public agency which has the principal responsibility for carrying out or approving the proposed activity becomes the “lead agency” and the others become “responsible agencies”. The lead agency takes the lead in preparing the EIA report with assistance from responsible agencies. This distinction helps differentiate the roles and responsibilities among the public agencies concerned in the EIA process.

3.4 The State Clearinghouse of the Governor’s Office of Planning and Research facilitates the flow of the EIA-related information among the lead agency and responsible agencies throughout the EIA process.⁵ For instance, the State Clearinghouse co-ordinates the distribution of documents among the public agencies concerned.

² Appendix I shows the flow chart of the EIA process in California.

³ Section 21063 of CEQA defines a “public agency” as “any state agency, board, or commission, any county, city and county, city, regional agency, public district, redevelopment agency, or other political subdivision”.

⁴ Sections 21080 and 21084 of CEQA and Articles 18 and 19 of CEQA Guidelines.

⁵ Section 21080 of CEQA.

Roles and responsibilities of parties involved

3.5 While CEQA only specifies the framework for the conduct of EIA, the details of the assessment methodology and the measures taken to facilitate the EIA process are determined by the lead agency. In essence, the lead agency determines the scope of an EIA report, and decides to prepare the EIA report by its own staff or engaging other parties such as consultancy firms to prepare the report or a combination of both. The lead agency also determines the manner in which responsible agencies and the public are consulted.

3.6 With reference to but not bound by the findings of the EIA report of the proposed activity, the lead agency and responsible agencies decide within their statutory responsibilities whether or not permission should be granted to the proposed activity. However, if the lead agency or a responsible agency approves a proposed activity against the findings of the EIA report, the lead agency or the responsible agency is required to make justification on its decision. Both the lead agency and responsible agencies monitor the environmental impacts caused by the proposed activity within their statutory responsibilities.

Public participation

3.7 Under CEQA, while the lead agency is encouraged but not legally required to consult the public on the scope of an EIA report, it is required to consult the public with regard to the draft EIA report during the review stage of the EIA process. During the review period, members of the public may submit their comments on the draft EIA report to the lead agency. The lead agency may also organize public meetings to collect views. The lead agency is required to include in the final EIA report its responses to significant environmental issues raised during the review period.

4. The Netherlands

Legislative framework

4.1 The *Environmental Management Act (EMA)*⁶, the *Environmental Impact Assessment Decree 1994* (Decree) and the *Environmental Impact Assessment (Inception Memorandum) Regulations* (Regulations) provide the legislative framework for EIA in the Netherlands.⁷

⁶ The *Environmental Protection (General Provisions) Act* was amended in 1986 to incorporate provisions on EIA and these provisions were consolidated in EMA in 1993.

⁷ Appendix II shows the general scheme of the EIA process in the Netherlands.

4.2 Under EMA, proposed activities are sorted into two groups. The first group of proposed activities includes those which may have serious environmental impacts, e.g. construction of a trunk road, motorway or express road.⁸ The second group of proposed activities includes those which may only have significant environmental impacts under particular circumstances, e.g. construction of a road of four or more lanes and between five and 10 kilometres in length.⁹ While mandatory EIA is required for the first group of proposed activities, the requirement for EIA for the second group is at the discretion of the competent authority¹⁰ concerned.

4.3 Applicants of proposed activities can apply for exemption from EIA. The main reasons for exemption from EIA include, inter alia, that an EIA report has previously been prepared for the same type of proposed activities and a second EIA report for the proposed activity is not likely to add any new information concerning the possible environmental impacts caused by this type of proposed activities.¹¹

Enforcement agency

4.4 According to EMA, there is no designated enforcement agency to enforce the provisions on EIA. The responsibility for ensuring compliance with the provisions on EIA falls on the competent authority which undertakes or approves a proposed activity. In the case of more than one competent authority is involved, all competent authorities related to the proposed activity jointly decide, in consultation with the Commission for Environmental Impact Assessment (EIA Commission), matters arising from the EIA process. For instance, all competent authorities concerned jointly decide whether or not a proposed activity requires an EIA report.

Roles and responsibilities of parties involved

4.5 The competent authority manages the EIA process. It determines if the proposed activity is subject to EIA, establishes the scope of an EIA report, conducts a review on the EIA report, decides whether or not permission for the proposed activity should be granted and monitors the environmental impacts of the proposed activity. Although the competent authority has the power to grant permission to a proposed activity, it is required to explain how the findings of and comments and recommendations on the EIA report have been taken into account when reaching that particular decision.¹²

⁸ Section 7.2 of EMA and Part C of the Annex of the Decree.

⁹ Sections 7.3 and 7.4 of EMA and Part D of the Annex of the Decree.

¹⁰ Section 1.1 of EMA defines a “competent authority” as “a government body empowered to give decisions.” Under EMA, a competent authority decides whether or not an EIA report is required for a proposed activity and whether any mitigation measures are necessary to reduce the environmental impacts caused by a proposed activity.

¹¹ Section 7.5 of EMA.

¹² Section 7.37 of EMA.

4.6 The applicant is responsible for preparing the EIA report of the proposed activity and he/she must ensure that the report meets the requirements stipulated by the competent authority.

4.7 The EIA Commission plays an advisory role in the EIA process. The competent authority seeks advice from the EIA Commission when processing applications for exemption from EIA as well as when preparing and reviewing EIA reports. The competent authority is also required to forward all of the comments collected about the proposed activity to the EIA Commission for its preparation of review reports.

Public participation

4.8 The EIA Commission is a private foundation, with its budget funded by the Dutch government. It provides advice to competent authorities and assesses the quality of information available to competent authorities when making its decisions. In performing its duties, the EIA Commission forms working groups, each of which comprises three to five advisers chosen for their specific expertise from a pool of about 400 experts.

4.9 The public is involved in almost every step of EIA. When a competent authority receives an application that is subject to EIA, it is required to inform the public and solicit public views on the scope of the EIA report. The competent authority is required to invite the public to comment on the EIA report and organize a public hearing. The competent authority is also required to invite comments from the public on the investigation report on the environmental impact of the proposed activity in the follow-up stage of the EIA process.

5. Taiwan

Legislative framework

5.1 The *Environmental Impact Assessment Act* (EIAA) (環境影響評估法) enacted in 1994 and some rules and guidelines¹³ promulgated subsequently by the Environmental Protection Administration of Taiwan (TEPA) provide the legislative framework for EIA in Taiwan.¹⁴

¹³ The three main rules and guidelines are *Implementation Rules for the Environmental Impact Assessment Act* (環境影響評估法施行細則), *Details and Scope Identification Criteria for the Development Activities that shall Conduct Environmental Impact Assessment* (開發行為應實施環境影響評估細目及範圍認定標準) and *Guidelines for Conducting Environmental Impact Assessment of Development Activities* (開發行為環境影響評估作業準則).

¹⁴ Appendix III shows the flow chart of the EIA process in Taiwan.

5.2 Under EIAA, 10 categories of proposed activities which are likely to cause adverse impacts on the environment are required to conduct EIA without exemption. Examples of these activities are construction of roads, railways, harbours and airports.¹⁵

Enforcement agency

5.3 TEPA is the designated agency to enforce the relevant legislation. Under EIAA, TEPA is authorized to promulgate rules and guidelines to stipulate the details of the EIA procedures.

Roles and responsibilities of parties involved

5.4 The applicant is required to prepare a Phase I EIA report which provides an initial assessment of the environmental impact of the proposed activity. If TEPA determines that the proposed activity is likely to cause significant adverse impacts on the environment, the applicant is required to prepare a Phase II EIA report. If TEPA determines that a Phase II EIA report is not required, the applicant will organize a public meeting to explain the proposed activity to all parties concerned including members of the public. In the follow-up stage, the applicant may be required by TEPA to submit an environmental impact survey report, giving an account of the environmental impacts caused by the proposed activity.

5.5 As mentioned in the above paragraph, TEPA examines the Phase I EIA report of a proposed activity to determine whether or not a Phase II EIA report is required. If a Phase II EIA report is required, TEPA will organize a scoping meeting and invite all parties concerned including members of the public to discuss the scope of the Phase II EIA report. TEPA will review the Phase II EIA report and determine whether or not the proposed activity should be allowed to proceed. TEPA's decision has a binding effect on the permission-granting government agency. In other words, a permit will not be issued to the applicant if TEPA decides that the proposed activity should not be allowed to proceed. TEPA also monitors the environmental impacts caused by the proposed activity.

5.6 The permission-granting government agency is required to organize the review of the Phase II EIA report which includes an on-site inspection and a public meeting. All parties concerned including members of the public are invited to attend the on-site inspection to facilitate their understanding of the proposed activity and to join the public meeting to review the Phase II EIA report. The permission-granting government agency prepares records of the on-site inspection and minutes of meeting for TEPA's consideration.

¹⁵ Article 5 of EIAA.

Public participation

5.7 EIAA requires TEPA to establish an Environmental Impact Assessment Review Committee to review EIA reports and advise TEPA on EIA-related matters. The Review Committee consists of 21 members – seven of them are government officials, with the Minister of EPA and the Deputy Minister of EPA being the Chairman and the Deputy Chairman of the Review Committee respectively. The remaining 14 members are experts and scholars in the field of EIA.¹⁶

5.8 Members of the public are invited to attend scoping meetings to discuss the scope of Phase II EIA reports. They are also invited to give comments on EIA reports during the review stage of the EIA process. In addition, members of the public are invited to join on-site inspections and public meetings to understand more of the proposed activities.

6. The Hong Kong Special Administrative Region

Legislative framework

6.1 The *Environmental Impact Assessment Ordinance* (EIAO) enacted in 1997 and its subsidiary legislation¹⁷ provide the legislative framework for EIA in HKSAR.¹⁸

6.2 Under EIAO, proposed activities which are likely to have adverse impacts on the environment are known as “designated projects”. Designated projects are classified into two categories. While EIA for the first category is discretionary, EIA for the second category is mandatory. Examples of the first category of proposed activities are construction of roads, railways and depots and decommissioning of an oil refinery.¹⁹ Examples of the second category of proposed activities are engineering feasibility studies of urban development projects with a study area covering more than 20 hectares or involving a total population of more than 100 000 residents.²⁰

¹⁶ Articles 3 and 4 of the *Organic Rules of the EIA Review Committee*.

¹⁷ *Environmental Impact Assessment (Amendment of Schedule 2) Order 1999*, *Environmental Impact Assessment (Appeal Board) Regulation*, *Environmental Impact Assessment (Fees) Regulation* and *Technical Memorandum on Environmental Impact Assessment Process* are the relevant pieces of subsidiary legislation of EIAO.

¹⁸ Appendix IV shows the flow chart of the EIA process in HKSAR.

¹⁹ Schedule 2 of EIAO.

²⁰ Schedule 3 of EIAO.

6.3 An applicant may apply for an environmental permit to proceed with a proposed activity of the first category without EIA. The Director of the Environmental Protection Department (Director) is authorized by EIAO to approve such an application on the grounds that the findings of a previous EIA report approved by EPD for a similar activity are still valid, and the proposed activity is unlikely to cause significant environmental impacts.²¹

Enforcement agency

6.4 EPD is the designated agency to enforce EIAO. There is also an independent appeal board appointed by the Chief Executive to handle appeals against decisions of the Director. The appeal board's decisions have a binding effect on the Director.²²

Roles and responsibilities of parties involved

6.5 EPD manages the EIA process. It screens proposed activities that require EIA reports, decides the scope of EIA reports, and examines and approves EIA reports. EPD decides whether or not a proposed activity should be allowed to proceed and monitors the environmental impacts of the proposed activity. EPD also co-ordinates all of the consultation works related to the proposed activity.

6.6 The applicant is required to inform the public of the proposed activity and to prepare relevant reports at the scoping and review stages of the EIA process.²³

Public participation

6.7 The Advisory Council on the Environment (ACE) is an advisory committee of the Environment, Transport and Works Bureau of the Government. EPD may seek ACE's comments on EIA reports. The Environmental Impact Assessment Subcommittee of ACE receives and studies EIA reports of major development projects and reports its findings and recommendations to ACE. ACE consists of 14 members who are experts and scholars in the field of EIA.

6.8 Members of the public are invited to provide inputs on the scope of EIA reports and to review EIA reports when they are published.

²¹ Section 5(1)(b) of EIAO.

²² Section 18 of the EIAO.

²³ Sections 5(2)(c) and 7(1)(b) of EIAO.

7. Comparison of the environmental impact assessment mechanisms

7.1 Table 1 compares the main features of the different procedures in the EIA process implemented in California, the Netherlands, Taiwan and HKSAR.

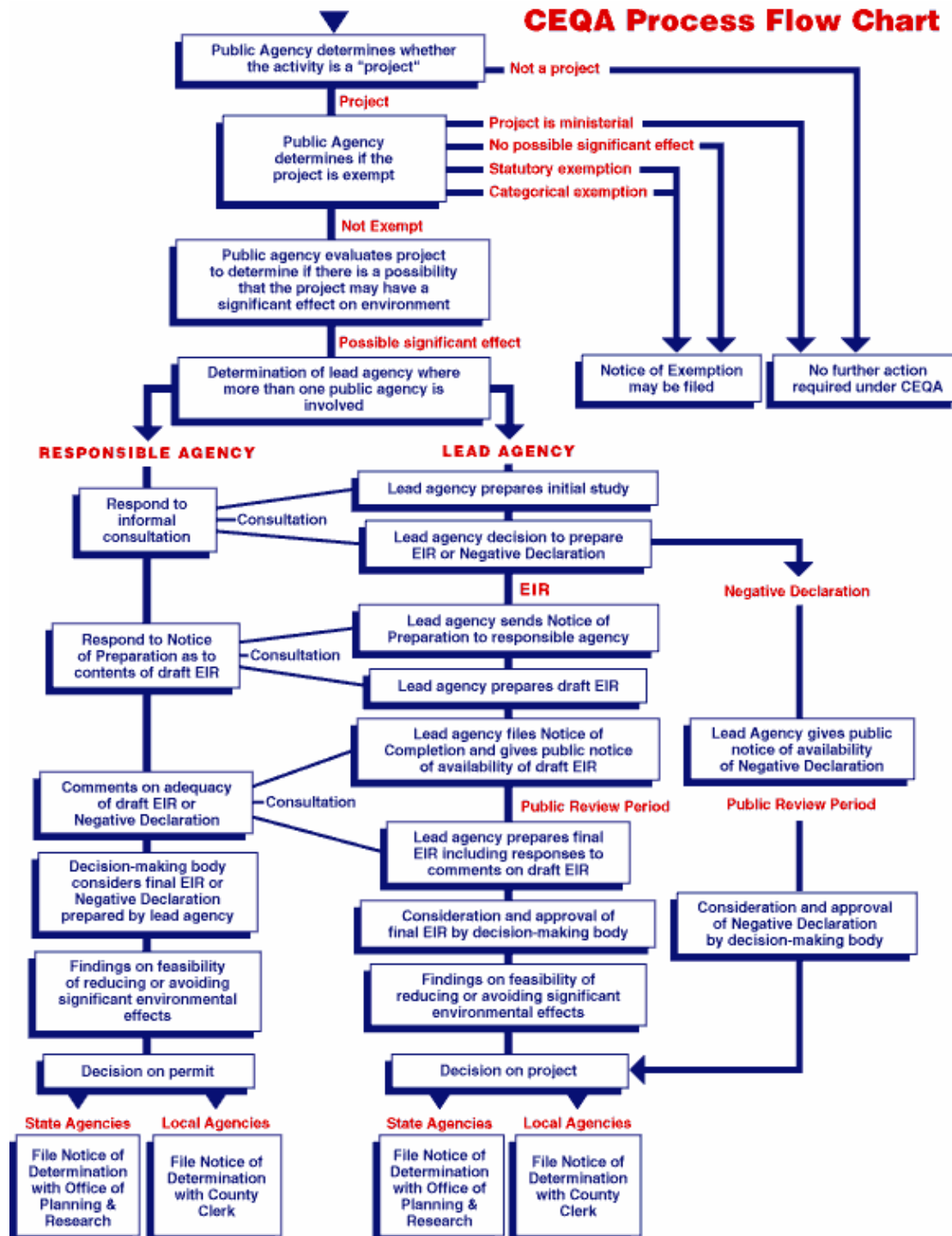
Table 1 - The mechanism of environmental impact assessment in selected places

	California	The Netherlands	Taiwan	HKSAR
Legislative framework				
environmental ordinance	Yes	Yes	Yes	Yes
designated enforcement agency	No	No	Yes	Yes
independent EIA advisory committee	No	Yes	No	No
independent appeal board	No	No	No	Yes
Screening				
determined by a public authority at its discretion	Yes	Yes	No	Yes
Scoping				
legally required to consult other public authorities concerned	Yes	Yes	Yes	Yes
legally required to consult EIA advisory committee	No	Yes	Yes	Yes
legally required to consult the public	No	Yes	Yes	Yes
Preparation of EIA report				
by a public authority	Yes	No	No	No
by the applicant	No	Yes	Yes	Yes
Review				
legally required to consult other public authorities concerned	Yes	Yes	Yes	Yes
legally required to consult EIA advisory committee	No	Yes	Yes	Yes
legally required to consult the public	Yes	Yes	Yes	Yes
legally required to conduct on-site inspection	No	No	Yes	No
legally required to conduct public hearing	No	Yes	No	No
Decision-making				
granting of permission bound by EIA findings	No	No	Yes	Yes
Follow-up				
monitoring of the environmental impact of the proposed activity	Yes	Yes	Yes	Yes

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Appendix I



Source: California Environmental Quality Act.

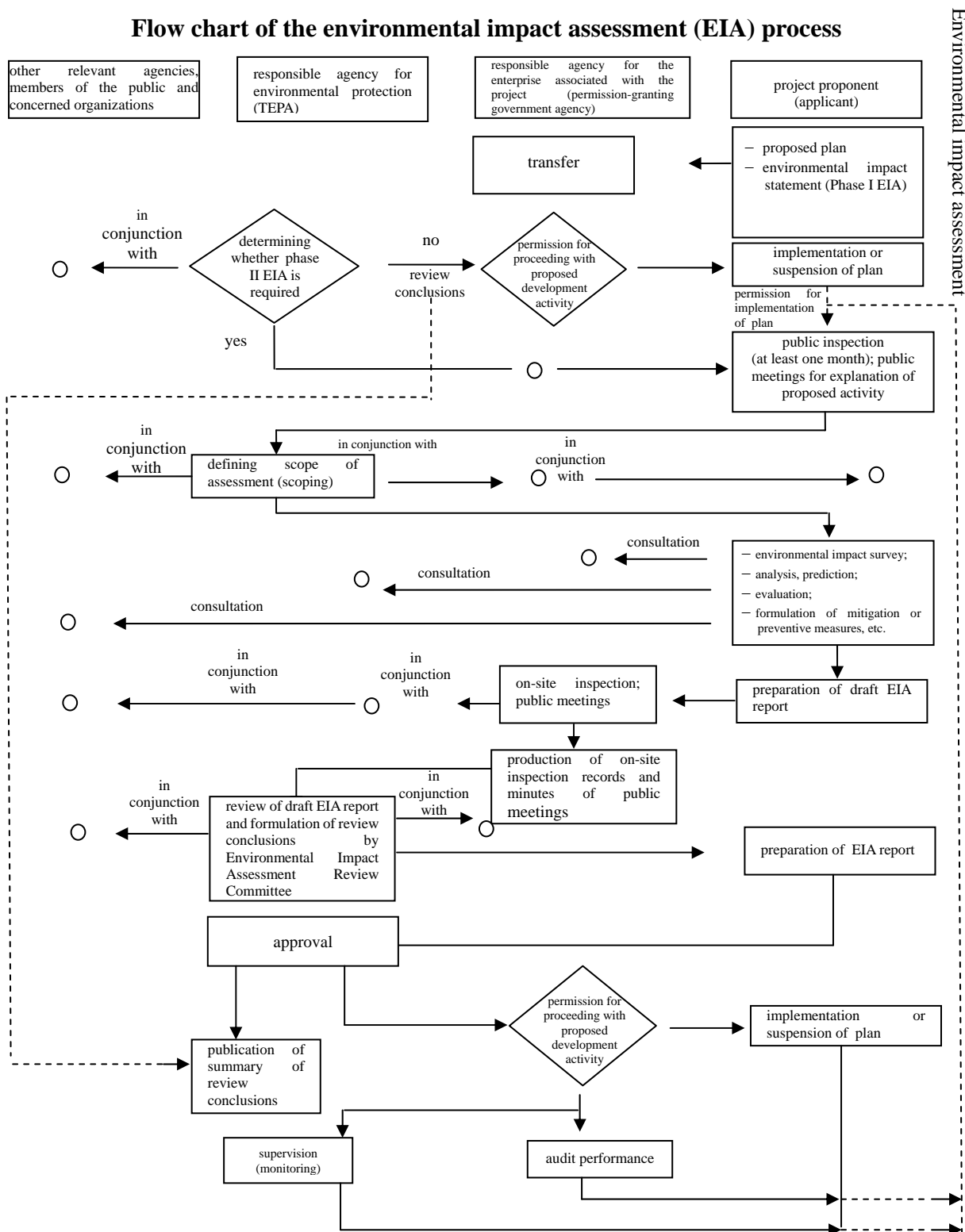
Appendix II
**General scheme of the Environmental Impact Assessment-procedure
in the Netherlands**

Environmental Impact Assessment	what happens?
inception memorandum	The proponent presents the inception memorandum (also called: notification of intent or starting note) with a brief description of the proposed activity. The competent authority makes the memorandum public. The procedure begins.
public participation	In a public participation period of 4 weeks, the public and the advisers comment and advising on the memorandum to the competent authority. This participation and advising aims at the guidelines for the contents of the Environmental Impact Statement (EIS). Especially the advice of the EIA Commission on the guidelines is important.
guidelines	13 weeks after the publication of the inception memorandum, the competent authority draws up the guidelines. The guidelines define the environmental effects and alternatives to be assessed in the EIS.
production of the Environmental Impact Statement	The proponent is responsible for drawing up the EIS. There is no maximum time limit. In this phase, an intensive interaction between the EIS process and the development of the project or plan is recommended. As soon as the EIS is ready, the proponent sends it with the permit request or draft plan to the competent authority.
acceptation of the Environmental Impact Statement	The competent authority checks the EIS on the basis of the guidelines and legal requirements within 6 weeks.
publication of the Environmental Impact Statement and permit request or the draft plan	The competent authority publishes the EIS within 8 weeks after receiving it. The EIS is published simultaneously with the permit request for public comment and advising. An EIS for a plan is published together with the draft plan.
public participation, advising and hearing	The public and the advisers give their comments on the EIS and on the permit request or draft plan. The public participation period is at least 4 weeks. A hearing is included.
review of the EIS	Within 5 weeks after the public participation period, the EIA Commission reviews the EIS both for completeness and scientific quality, taking into account the comments from the advisers and public participation.
decision	The competent authority decides on the basis of the EIS and the received comments and advice. It motivates in the decision how the EIS (impacts and alternatives) and comments were taken into account. The competent authority must also formulate an evaluation programme.
evaluation	In co-operation with the proponent, the competent authority evaluates the environmental impacts on the basis of the evaluation programme. If necessary, the competent authority may order extra mitigating measures to reduce the environmental effects.

Source: Ministry of Housing, Spatial Planning and the Environment (2000).

Appendix III

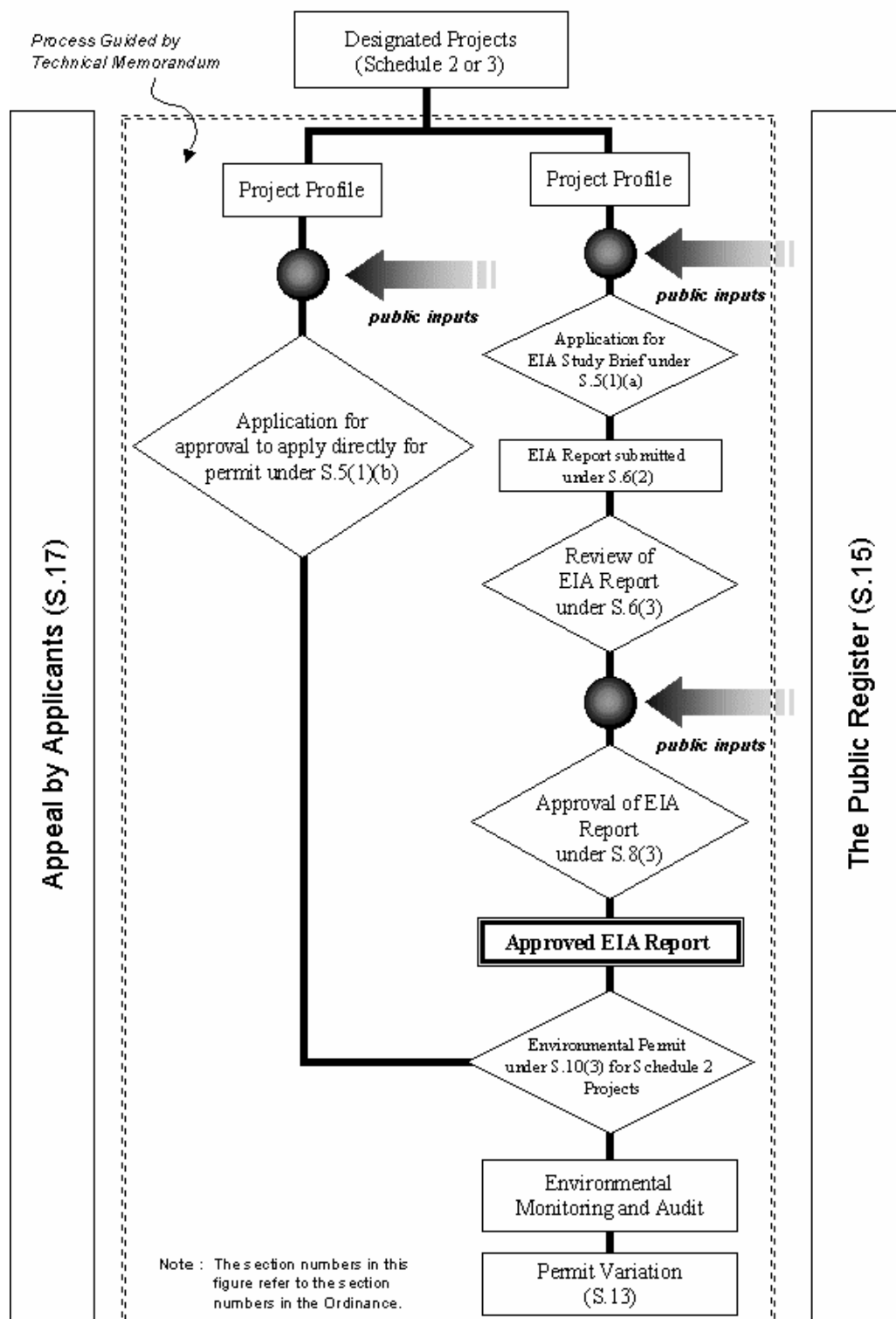
Flow chart of the environmental impact assessment (EIA) process



Source: Environmental Impact Assessment Act.

Appendix IV

The statutory environmental impact assessment process



Source: Environmental Protection Department (2004).

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California

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Others

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