

## Appendix 5 JBIC Environmental Guidelines for ODA Loan

\*This section covers ex-OECF related projects, now implementing by Japan Bank for International Cooperation (JBIC)

## 1. JBIC Environmental Guidelines for ODA Loans (Hereinafter “the Guidelines”)

### 1.1 Components of the Guidelines

The components of Guidelines are as below;

- I. Purpose of the Guidelines
  - 1) Nature of the Guidelines
  - 2) Classification of projects
  - 3) EIA report
  - 4) Basic rules for environmental consideration
- II. Check Items and Comments

### 1.2 Outline of the Guidelines

#### 1.2.1. Project Classifications and Screening for EIA

The Guidelines introduce classification system as a screening process of EIA in the light of magnitude of expected potential environmental impact. Proposed projects are classified into category A,B or C according to the OECF criteria stated in the Guidelines (see BOX 1).

#### 1.2.2. Requirement for EIA Report

- (1) In the case of Category A projects, the recipient country is required to submit the EIA Report to the JBIC following completion of the requisite procedures in that country.
- (2) It is desirable that the contents of the EIA Report submitted in accordance with (1) above be made available to the public in the recipient country.

## Box 1 Criteria for Classification of Project

Details of each of the 3 categories are given below. However, it should be borne in mind that the items are examples only and the list is not exhaustive.

### I. Category A: Projects corresponding to at least one of the following items

#### (1) Large projects (both new and rehabilitation) of the following kinds:

Road and railroad

Airports

Ports and harbours

Electric power generation

Industry in general

Mining development

Forestry

Irrigation

Waste disposal

Development necessitating submergence of large areas

River basin development

Development involving the manufacture or use of a large amount hazardous and/or toxic materials or pesticides

Development involving reclamation affecting bodies of water

#### (2) Projects implemented in, or which may affect, such areas as the following:

Areas where there is the danger of salt accumulation or soil erosion

Semi-arid areas

Natural forests in tropical areas

Water sources

Habitats of value to protection and conservation and/or sustainable use of fish and wildlife resources (including coral reef or mangrove ecosystems)

Areas of unique interest (historical, cultural or scientific)

Areas of concentrations of population or industrial activities

Areas of particular social interest to specific vulnerable population groups

(nomadic people, etc., with traditional lifestyle)

#### (3) Projects with such characteristics as the following:

Projects expected to have a wide, diverse and irreversible environmental impact

Projects affecting a large number of inhabitants (other than impacts resulting from involuntary resettlement)

Projects consuming a large amount of non-renewable natural resources

Projects resulting in the occurrence of significant change in land use or the social, physical and/or ecological environment

Projects Causing the generation or involving the disposal of a large amount of hazardous and/or toxic wastes.

2. Category B:

(1) Projects belonging to the following sectors and not belonging to Category A:

Road and Railroad

Airports

Ports and harbours

Water supply

Sewerage

Electric power generation

Electric power transmission

Industry in general

Mining development

Oil and gas pipelines

Diversion channels

Forestry

Irrigation

Waste disposal

(2) Projects other than (1) and with a less remarkable environmental impact than a Category A project

(3) Engineering Service Loans provided for projects belonging to Category A

3. Category C

(1) Projects not normally expected to have an environmental impact

(2) Certain telecommunication, education, human resource development projects, etc., may in certain cases, fall within this category.

1.3 Basic Rules

(1) A project is to comply with regulations, etc., stipulated in the laws of the recipient country relating to the environment, environmental conventions to which the recipient country is a party, etc.

1.3.1 Environmental Pollution

(2) Environmental Pollution

In Principle, a project is to comply with the regulatory standards, such as emission standards, of the recipient country. The recipient country is also to endeavour to attain any existing government target values for the protection of the environment, such as Environmental Quality Standards

applying to the area around the project site.

If emission standards are not currently established in the recipient country, when necessary, the JBIC encourages the recipient country to establish provisional emission target levels for the project, referring to the emission standards established by international organizations, Japan or other countries, taking cost-benefit considerations, etc., into consideration.

### 1.3.2 The Natural Environment

#### (3) The natural environment

In principle, a project is to be implemented outside designated nature conservation areas established in accordance with the national laws, etc., of the recipient country. In addition, a project is not to have a significant impact on such conservation areas.

Necessary action is to be taken to prevent significant project impact on the lives of endangered species and to ensure conservation of biodiversity.

### 1.3.3 Involuntary Resettlement

#### (4) Involuntary resettlement

In the Planning and implementation of a project, there is to be adequate consideration for people who will be called upon to relocate and resettle involuntarily and/or lose a major source of income because of the project (hereinafter "project-affected people").

There is to be careful examination of alternatives at the planning stage with a view to ensuring that the number of project-affected people is the smallest possible.

For a project which necessitates involuntary resettlement, plans are to be prepared beforehand in order to mitigate any negative impact. These plans are to be prepared by the recipient country's government following appropriate hearings of the opinions of project-affected people.

Plans to mitigate negative impacts of involuntary resettlement are to have as their objective the restoring of living, income, etc., for project-affected people after resettlement.

### 1.3.4 Measures to conserve the environment

#### (5) Measures to conserve the environment

The cost of measures to conserve the environment (including the social environment, such as the cost of involuntary resettlement) are to be included in the project cost. In particular, for a project which requires measures involving pollution-control equipment and monitoring, financing to cover operation and maintenance is to be duly obtained.

It is desirable, in the interests of objectivity in the evaluation and monitoring of project-running cost of

the pollution prevention equipment and monitoring equipment as such cost often has low priority in budget allocation.

#### 1.4 Check Items and Comments

The chapter II of the Guidelines indicates environmental check items to which close attention is to be given and comments relating to those items. This chapter covers the major sectors where special environmental consideration is required among the loaning activities. The environmental issues, which each sector must be considered, are listed separately. The waste disposal sector was newly added to the check items and comments on the revised Guidelines. As a result, the total number of such sector covers by the Guidelines has increased to 17 from 16.

##### Box2 Sectors for check items and comments

- 1 ) Road and railroad
- 2 ) Airports
- 3 ) Ports and Harbor
- 4 ) Water supply
- 5 ) Sewerage
- 6 ) Thermal power plants
- 7 ) Hydropower plants
- 8 ) Electric power transmission lines, voltage reduction and distribution
- 9 ) Industry in general
- 10) Mining development
- 11) Oil and Gas pipelines
- 12) Cement plants
- 13) Fertilizer plants
- 14) Diversion channels
- 15) Forestry
- 16) Irrigation
- 17) Waste disposal and waste treatment

The check items and comments of each sector include 1) environmental pollution such as air pollution, waste pollution, soil contamination, noise, vibration, offensive odors, etc., 2) natural environment such as involuntary resettlement, historical/cultural heritage. Human environmental issues are not assessed under the Japanese EIA system. These issues are, however, included in the guidelines, considering importance of social environmental problems in developing countries.

Environmental Checklist (Irrigation)

Check Items	Major	Small	None	Not Clear	Problems	Action & Countermeasures Planned	Remarks
<p>1. Air pollution caused by spraying of agricultural chemicals, fisheries, and other water utilization of changes in the water system resulting from project construction</p> <p>2. Water pollution caused by effluent from irrigated fields</p> <p>Typical items to be checked</p>	✓	✓	✓		<p>Discription of identified Problems according to check items</p>	<p>Planned actions and Countermeasures for identified problems</p>	<p>Remarks to be recorded</p>
<p>1. Effect of construction and operation of the facility on the ecology</p> <p>2. Effect on landscape</p> <p>3. _____</p>	✓	✓	✓				<p>Additional items should be described if necessary</p>
<p>1. Effect of the project on historical and cultural heritage</p> <p>2. Effect on existing infrastructure</p> <p>3. Relocation and effect on land-use</p> <p>4. Effect on other water use</p>	✓	✓	✓	✓			<p>If the magnitude is unclear, actions for clarification should be stated.</p>
<p>1. Effect on the environment during construction period</p> <p>2. Environmental Monitoring</p>							

note: If the project contains dam construction as a component, the checklist for Hydropower should also be referred.

## 2. Project cycle and the Environmental Guidelines

At every stage of a development project, careful study of environmental impacts needs to be carried out in order to determine a suitable measure to minimize project's adverse impacts on the environment. The revised Guidelines are intended to be used both intending borrower and JBIC staff. Use of the Guidelines will make comprehensive and systematic environmental review possible at every stage of a development project.

### 2.1 Planning and preparatory stages

The JBIC has distributed the Guidelines to recipient countries to consider the environment as early as possible in a development cycle and to ensure that the environmental aspects of a project are fully covered. The Guidelines describe some guidance to be done at the preparatory stages by recipient country, and in accordance with project category, it is requested to submit EIA report or environment-related documents before JBIC appraisal. This means that well understanding and project preparation are indispensable for getting JBIC loan. Intending borrowers are advised to fully consider all the times described in the Guidelines and study environmental factors comprehensively from the earliest stage of a project cycle and carry out environmental protection measures proposed before making loan request.

### 2.2 Pre-Appraisal and Appraisal Stages

The Guidelines give guiding principles related to JBIC's environmental considerations in its appraisal of a project. JBIC staff assigned Operations Departments examine intending borrowers' environmental findings and measures taken in an EIA report or related documents such as a F/S report for each individual project. For missing no important factor, the Guidelines and the Environmental Profiles in a recipient country are referred to. The JBIC sends an intending borrower a further questionnaire, if necessary. In the case that borrower's country has regulatory standards, those are strictly observed. If borrower's country has no such standards, the standards of Japan or international organizations are referred to. In this case, close consultation between the borrower and the JBIC is necessary. As an EIA usually covers impact in its country only where a project will be implemented. JBIC adds to its evaluation if there are combined impacts posed by other projects or global level impacts such as on bio-diversity, climate changes, and acid rain.

JBIC appraisal mission discuss environmental problems and possible environmental-protection measures with intending borrower. JBIC appraisal mission make sure that each project's impact on the environment conforms to the Guidelines. JBIC reviews findings of appraisal by JBIC mission. Then, if necessary, the JBIC has further negotiations with borrower concerning appropriate measure to ensure environmental protection. The JBIC consults with the Japanese government in the process of negotiations. The negotiation must be completed before a L/A can be concluded. If further environmental studies on environment conservation measures are found necessary as a result of reviewing in accordance with the



Guidelines, the JBIC requires the borrowers to adopt appropriate measures. In this case, JBIC Engineering Service (E/S) Loans are available for implementing appropriate measures.

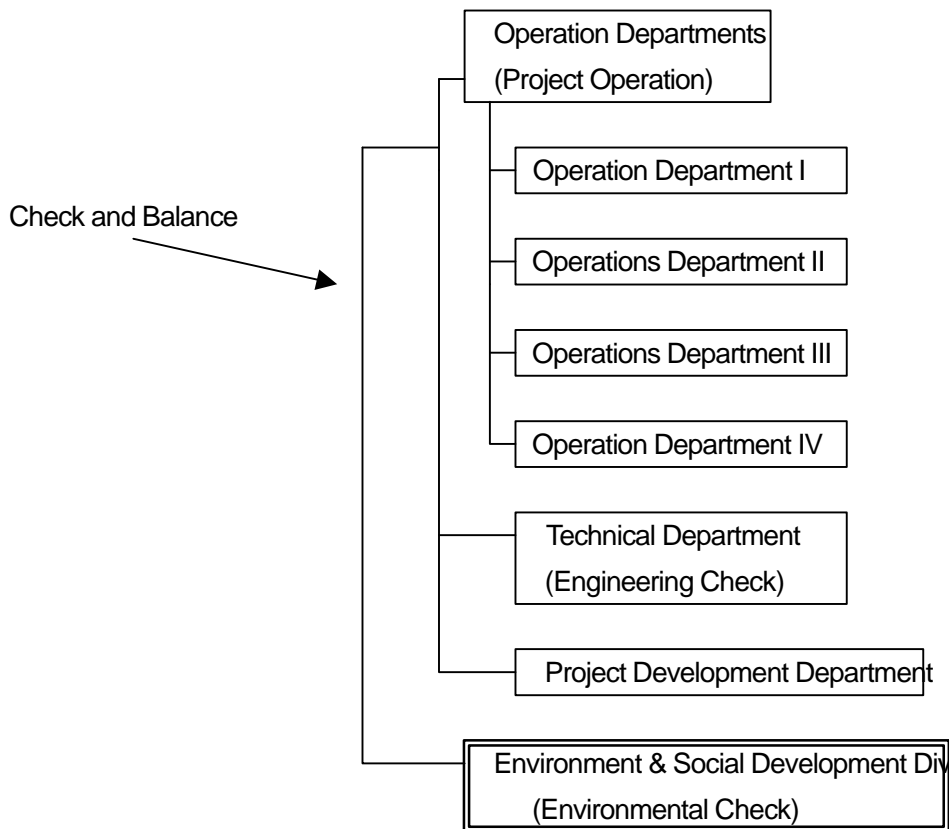
### 2.3 Implementation and Monitoring Stages

A project shall be carried out in such a way that will not have any considerable adverse effect on the environment during implementation and completion stages. The revised Guidelines (1995) strengthen more comprehensive environmental consideration policies during the project implementation and completion stage.

The Guidelines require that adequate measures and monitoring are carried out when considerable environment impact is expected. Moreover, the Guidelines newly require that a cost of measures to conserve the environment, such as pollution-control equipment, involuntary resettlement, and a cost of monitoring are to be included in whole development project cost. It is also necessary that executing agency of recipient country formulates an environment administration or utilizes a third party for monitoring and evaluation of project-related environmental measures.

### 3. Environmental Review Process in JBIC

Three major departments take part in environmental conservation in appraisal process. Operations Department consists of the divisions, which take in charge of loans for each recipient country. The division find needs of development assist recipient country to prepare projects and appraise request of assistance for the project. Another department, Technical Department, consists of three divisions, takes charge in technical appraisal and supervision. The other department, the Project Development Department deal with crosscutting issue. The Environment and Social Development Division in this department take charge in environmental and social development issue.



At appraisal stage, the Operations Department and the Technical Department jointly review primarily submitted request and relevant information in terms of necessity, economical feasibility, technical feasibility and environmental aspects of the project and summarize necessary information using several documentation formats including environmental checklists and several guidelines including the Guidelines.

Summarized information is reviewed by the Environment and Social Development Division to ensure that appropriate environmental review is taken by the other departments. This process is carried out through preparatory stage and appraisal stage. If the Environment and Social Development Division find the necessity of in depth consideration, the division may call environmental expert to review the submitted information including EIA report in detail and dispatch mission for supplemental survey.

If significant environmental impact is identified by the review process, JBIC negotiate with the recipient country to reform the project scope or design, or to formulate appropriate countermeasures for the impact. Even if such efforts are taken, the significant impact is found to be inevitable then the request is rejected.

The JBIC may put conditions to appraisal of projects in loan agreement or other manners, if necessary, in order to ensure recipient countries' implementation of proper countermeasure for mitigating the environmental impact.

#### 4. Monitoring and Evaluation of Projects

A project shall be carried out in such a way that will not have any considerable adverse effect on the environment during implementation and completion stages. The revised Guidelines strengthen more comprehensive environmental consideration policies during the project implementation and completion stage. The Guidelines require that adequate measures and monitoring are carried out when considerable environment impact is expected. Moreover, the Guidelines newly require that a cost of measures to conserve the environment, such as pollution-control equipment, involuntary resettlement, and a cost of monitoring are to be included in whole development project cost. It is also necessary that executing agency of recipient country formulates an environment administration or utilizes a third party for monitoring and evaluation of project-related environmental preservation measures.

To monitoring proper implementation of projects, JBIC may requests recipient country to submit interim reports or dispatch mission for monitoring if necessary. Two categories of SAFs, SAPI<sup>1</sup> (Special Assistance for Project Implementation) and SAPS<sup>2</sup> (Special Assistance for Project Sustainability), can be utilize to ensure environmental consideration of on-going or completed projects by identifying problems and proposing remedial measures.

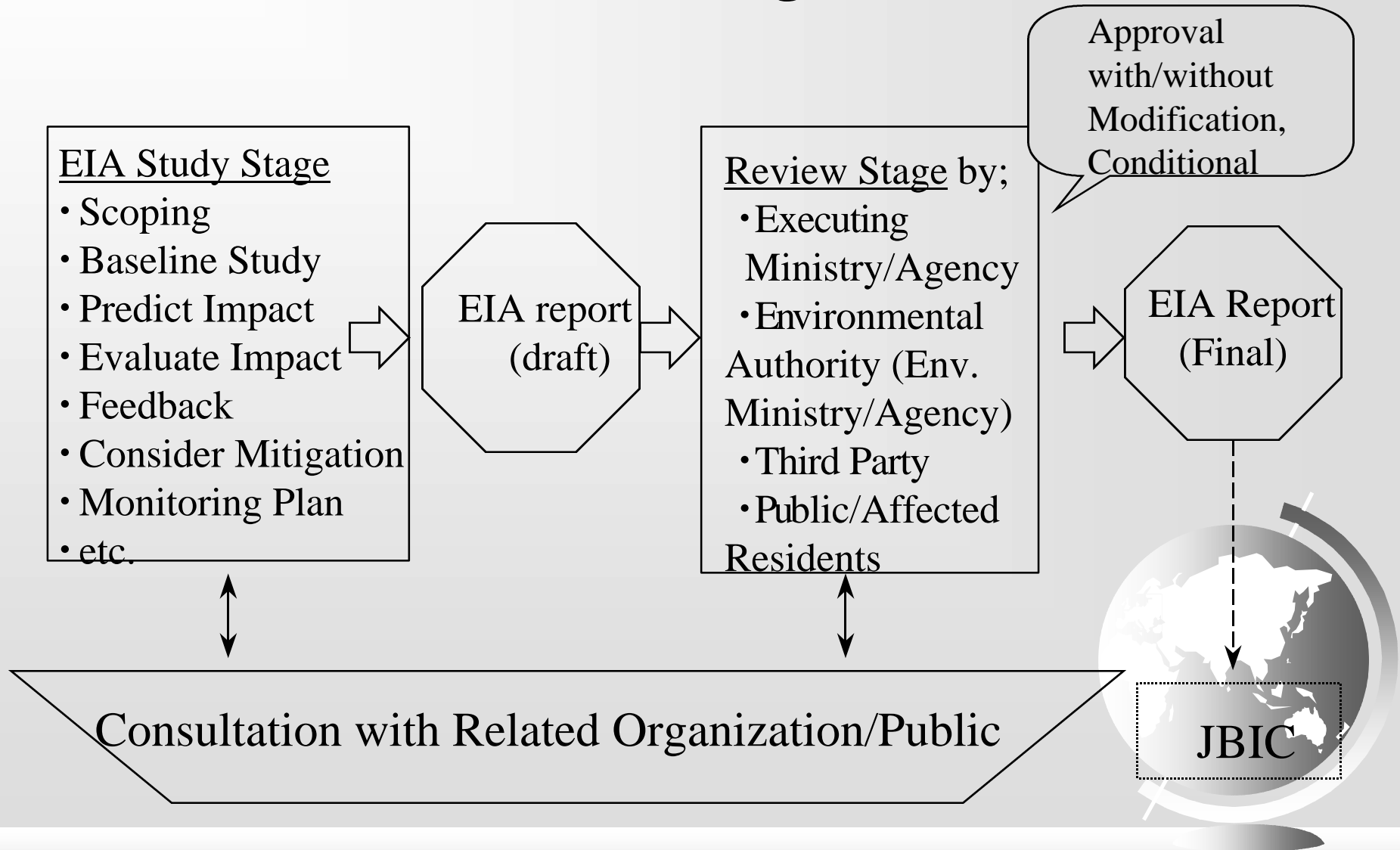
The Post Evaluation Group also carries out post-Evaluations of projects, which is a part of the Research Institute of Development Assistance in the JBIC. Post-Evaluations are conducted to verify that projects funded by JBIC were implemented and managed according to their initial plans and that they have achieved the expected results. The main purpose of the post-evaluation is to ensure that lessons learned from completed projects.

Note )

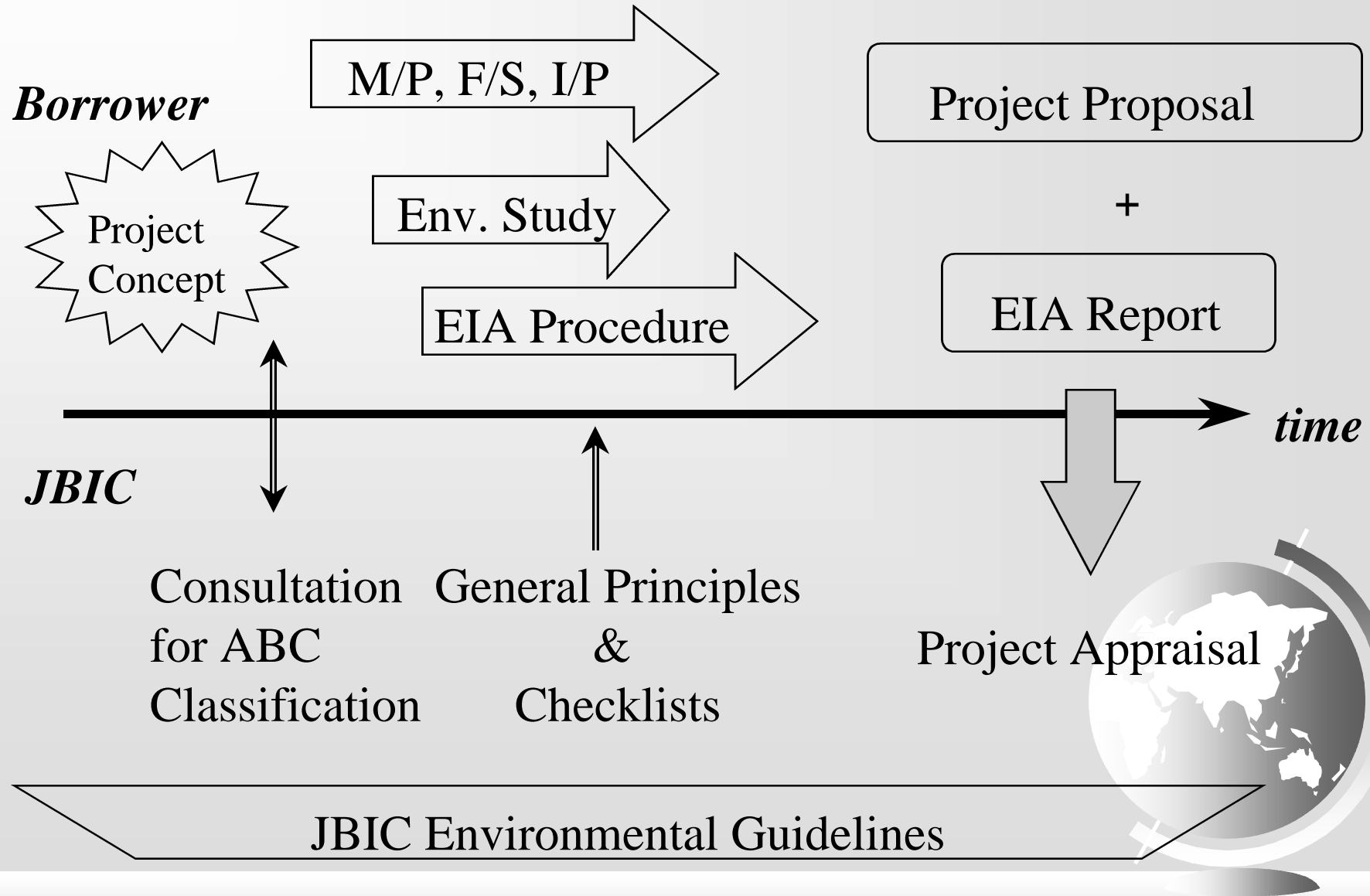
1) SAPI is an another category of SAPS. The primary purpose of SAPI is to study and identify problems that may hinder effective implementation of a particular project and to propose remedial measures to solve those problems in timely manner.

2) SAPS is last category of SAFs. The primary purpose of SAPS is to study and identify problems that impede effective operation or maintenance of a particular group of projects and to propose remedies.

# Environment Impact Assessment Procedure (in general)



# Implementation of Classification



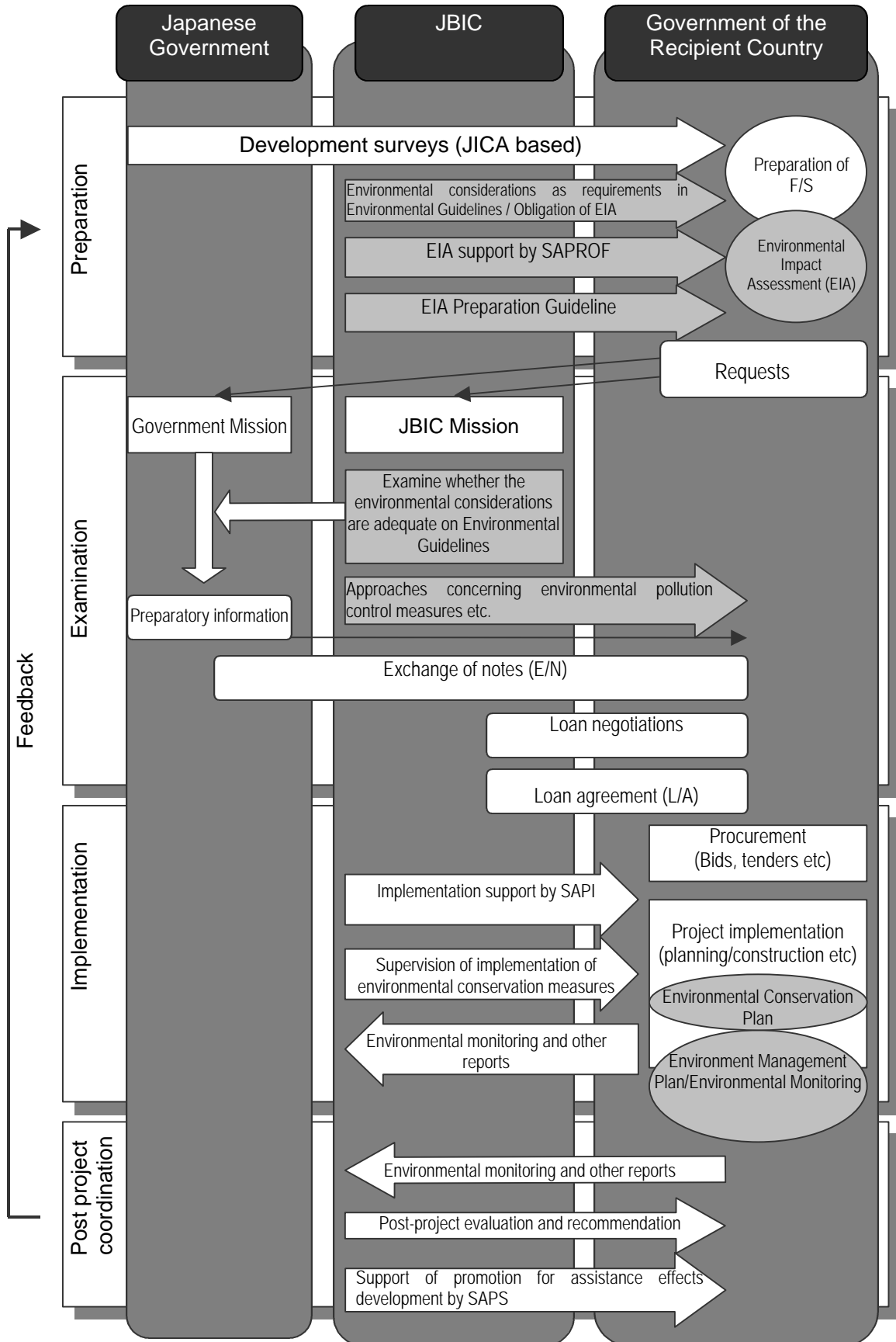
# Possible Assistance for Environmental Consideration

- ◆ SAPROF(Special Assistance for Project Formation)
  - may provide additional environmental study
- ◆ Engineering Service (E/S) Loan
  - may support EIA process through impact study for category 'A' projects (see criteria for classification)

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- ◆ JICA Development Study (M/P,F/S)
    - may include environmental consideration in line with JBIC Environmental Guidelines



# Environmental Consideration in the “Yen Loan” Project Cycle



## **Appendix 6 Environmental Impact Assessment Law in Japan**



## 1. Environmental Impact Assessment Law

### Point

Pursuant to the recommendation submitted by the Central Environment Council, entitled "How Environmental Impact Assessment Systems Should Be", the Environment Agency worked on the formulation of an environmental impact assessment bill. Coordination has successfully been achieved among the government offices concerned, and on Friday, March 28, 1997, the Cabinet decided to adopt the bill. The bill was then passed into law by a unanimous vote of the Diet on June 9, and promulgated on June 13 of the same year.

### 1.1 History

Environmental impact assessment represents arrangements under which undertakers themselves pay attention to environmental preservation by assessing possible environmental impacts before implementing large-scale development projects, etc. Promotion of environmental assessment is an extremely important policy measure for the prevention of environment deterioration and structuring of a sustainable society.

In Japan during the decade beginning in 1975, efforts were made for the enactment of an "environmental impact assessment law", and in 1981 a bill for the purpose was submitted to the Diet. The bill was dropped, however, when the House of Representatives was dissolved in 1983. After the dropping of the bill, the Cabinet decided to adopt a guideline entitled "On the Implementation of Environmental Impact Assessment" in 1984 in conformity with the main principles of the bill (Cabinet-decided EIA Guideline) for the purpose of implementing effective measures for the time being. In addition, environmental impact assessment was implemented in accordance with specific laws, such as the Public Water Body Reclamation Law, administrative guidance measures, such as the Ministry of International Trade and Industry decision on the location of power stations, ordinances and administrative summaries of local governments, and so forth.

Subsequently, a comprehensive research on the situation of implementation, at home and abroad, of systems for environmental impact assessment, etc., was conducted from July 1994 through June 1996 by a team of personnel from all the Ministries and Agencies concerned, based on the Diet deliberation on the Basic Environment Law in 1993 as well as the government policy adopted in the Basic Environment Program.

Following the results, the Prime Minister asked the Central Environment Council (Chukanshin) on June 28, 1996 to make recommendations on "How Future Systems for Environmental Impact Assessment Should Be".

The Central Environment Council heard opinions of various groups in Japan, and published its recommendations on February 10, 1997 with an eye toward their legislation. In response to the basic principles incorporated in the Council's report, the Environment Agency made efforts for coordination among government offices. As a consequence, the Cabinet decided to adopt the "Environmental Impact Assessment Bill" on Friday, March 28. This bill was passed into law by unanimous vote in the House of Representatives and the House of Councilors on May 6 and June 9, respectively, and promulgated on June 13 of the same year.

### 1.2 Main points of the Law

The Environmental Impact Assessment Law was drafted resting on the Cabinet-decided EIA Guideline and incorporating all basic principles put forward by the Central Environment Council. Specifically, the following points have been adopted for the first time:

- To expand the scope of environmental impact assessment by including power stations (under law), conventional railroads (under cabinet order), and large-scale forestry roads (under cabinet order), etc., as new items (Article 2, paragraph 2);
- To introduce a scheme to individually evaluate the necessity for the implementation of environmental impact assessment for projects (screening) which do not necessarily meet the scale requirement for the implementation of environmental impact assessment but whose scales are larger than a certain level (Article 2, paragraph 3, and Article 4);
- With a view to initiating the procedure at an early stage, to introduce a scheme for obtaining opinions concerning investigation methods (scoping) (Articles 5 through 10);
- To enlarge opportunities for citizens' participation by abolishing limitations by area, providing for two stages of opportunity to submit opinions, the statement-of-planning stage and the statement-of-preparation stage, and so forth (Articles 8 and 18);
- To enlarge and improve the items mentioned in the statement of preparation, such as descriptions concerning uncertainties and the status of consideration of measures for environmental preservation, and entry of names of those contracted (Article 14);
- Under the Cabinet-decided EIA Guideline, the Director-General of the Environment Agency is entitled to express his/her opinions only when he/she is asked to do so by the competent Minister. Under the bill, however, he/she is entitled to express opinions as necessary (Article 23);
- The undertaker is to review the statement of assessment in response to the opinions of the Director General of Environment Agency, etc. (Article 25);
- To define the status of ex post facto investigation in the systems for environmental impact assessment by introducing accounts on such investigations in the statement of preparation (Article 14, paragraph 1, item 7-c);
- To make it possible for undertakers to implement environmental impact assessment anew even if the statements of assessment have been published on their projects or their projects have been granted permission, etc., before the enforcement of the bill (Article 32 and Article 4 of the supplementary provisions);
- To provide for an opportunity for local governments to submit opinions at each stage of the procedure and, with respect to the procedure to be followed by local governments concerning designated projects and category 2 projects, not to mention the procedure concerning those projects other than designated projects and category 2 projects, to make it possible to provide for necessary rules in local ordinances, insofar as they do not contravene the provisions of this law (Article 60).

The law also provides for the following exceptions:

- Exceptions concerning projects designated in city planning (The person empowered to determine city planning conducts environmental impact assessment for the undertaker. Measures are to be adopted to adjust the timing of publication and the period of inspection, and so forth.);
- Exceptions concerning port planning (To conduct assessment at a higher planning stage with citizens' participation);

With respect to power stations, moreover, following the decision to provide for an exception to allow the central government to be involved at an early stage, a required exception has been stipulated in the Electric Utility Law.

### 1.3 Outline of the Law

#### (1) Projects to which the law is applicable

Projects undertaken by the Government or permitted or approved by it which are likely to have a substantial impact on environment, such as roads, dams, railroads, airfields, and power stations:

- 1) "Category 1 projects" = projects larger than a certain level for which environmental impact assessment must be implemented
- 2) "Category 2 projects" = projects with a size comparable to that of category 1 projects for which implementation or otherwise of environmental impact assessment is judged individually

#### (2) Procedure for environmental impact assessment

- 1) Determination with respect to category 2 projects  
With regard to category 2 projects, the administrative organ which grants permission, approval, etc., for the project in question determines whether or not to have environment impact assessment implemented after hearing the opinion of the prefectural governor and depending on the details of the project and the local characteristics.
- 2) Procedure for the statement of planning for environmental impact assessment  
The person who intends to undertake a project to which the law is applicable (the undertaker) prepares a statement of planning concerning items of environmental impact assessment and techniques used for investigation, etc., hears opinions of the prefectural governor, mayor(s), residents, etc., and identifies a specific method for environmental impact assessment.
- 3) Procedure for statement of preparation for environmental impact assessment  
Before starting on the project, the undertaker conducts investigation, estimation and assessment of environmental impact, and studies measures for environmental preservation, on the result of which the undertaker prepares a statement of preparation for environmental impact assessment and hears the opinions of the prefectural governor, mayor(s), residents, etc., on environmental preservation.
- 4) Procedure for statement of environmental impact assessment  
The undertaker prepares a statement of environmental impact assessment on the basis of 3) above.  
With regard to the statement of environmental impact assessment, the Director-General of the Environment Agency presents his/her opinion on environmental preservation, as necessary, to the administrative authorities that grant permission, approval, etc. Based on such opinion, the administrative authorities concerned present their opinion on environmental preservation to the undertaker.  
Based on these opinions, the undertaker makes revisions in the statement of environmental impact assessment.

- (3) Contents of statements of preparation, assessment, etc. (main differences from the existing system)

The environment which is subject to investigation, etc., is environment in general under the Basic Environment Law (the scope is not limited to pollution).

Items to be mentioned in the statements of preparation, etc., include those on the status of examination of measures for environmental preservation as well as those on investigations, etc., undertaken after the project has been started on.

- (4) Examination concerning environmental preservation at granting permission, approval, etc.

When conducting examinations concerning permission, approval, etc., for the projects to which the law applies, administrative authorities that grant permission, approval, etc., for such projects examine whether or not proper consideration is given to environmental preservation in the projects concerned in accordance with the statements of environmental impact assessment.

- (5) Other

With regard to power stations, exceptions will be provided for in the Electric Utility Law, in addition to the related provision in this law.

Projects Subject to the Environmental Impact Assessment Law

Type of Project	Scale of Category 1 Project	Scale of Category 2 Project
1	Roads (new addition of large-scale forest roads)	
	National vehicle expressways	All
	Metropolitan expressways, etc.	All roads of 4 lanes or more
	General national roads	4 lanes, 10 km or more
	Large-scale forest roads	2 lanes, 20 km or more
2	River work (addition of dams of small scall river, industrial water weirs, irrigation weirs and water supply weirs relating to secondary waterways, and reduction of scale)	
	Dams	Area under water - 100 ha or more
	Weirs	
	Lake and swamp water level adjustment facilities	Affected area - 100 ha or more
	Discharge channels	
3	Railways (addition of general railways and tracks (equivalent to general railways))	
	Bullet Train railways (including standard new lines)	All
	General railways (includes subways and elevation of tracks)	10 km or more
	Tracks (equivalent to general railways)	
4	Airports	Runway of 2500 m in length or more
5	Power Stations (includes new additions, in-house power generation and wholesale supply)	
	Hydroelectric power stations	Output of 30,000 kW or more
	Thermal power stations (other than geothermal)	Output of 150,000 kW or more
	Thermal power stations (geothermal)	Output of 10,000 kW or more
	Nuclear power stations	All
6	Final Waste Disposal Sites	30 ha or more
7	Landfill and Drainage of Public Waterways	Over 50 ha
8	Land Reallocation Projects	100 ha or more
9	Development of New Residential Areas	
10	Industrial Estate Land Preparation	
11	Foundation Preparation for New City	
12	Land Preparation for Distribution Business Hub	
13	Land Preparation for Residential Areas (including industrial estates) Environmental Business Groups Public Corporations for Housing and City Development Public Corporations for Regional Promotion and Development	
	Port Planning	Landfill and Excavation 300 ha or more

## 1.4 Fundamental Items

The Fundamental Items prescribe the items which form the basis of the following: "Determination Standards for Category 2 Projects" (hereinafter referred to as "Determination Standards") as prescribed by the competent Minister according to the regulations of Article 4, Item 9 of the Environmental Impact Assessment Law (hereinafter referred to as "the Law"); "Guidelines for the Selection of Environmental Impact Assessment Items and Means for Logically Conducting Investigations, Estimation and Assessment in Relation to the Said Items" (hereinafter referred to as "Selection Guidelines for Environmental Impact Assessment Items") as prescribed by the competent Minister according to the regulations of Article 11, Item 3 of the Law; and "Measures for the Preservation of the Environment" (hereinafter referred to as "Environmental Preservation Measures") as prescribed by the competent Minister according to the regulations of Article 12, Item 2 of the Law.

The following three points form the basic approach (philosophy) to the Fundamental Items prescribed on this occasion.

- 1) Flexibility in determining on an individual basis which items and methods are to be applied.
- 2) Fine tune project plans in stages, such as screening, scoping and statement of preparation.
- 3) Clearly state data and basis to enable checking by anyone.

Major items which have been newly incorporated into the Fundamental Items prescribed on this occasion, as against the Fundamental Items in the previous Cabinet-decided Guidelines, are as follows.

### (1) Screening

- 1) Determination Standards based on project content and Determination Standards based on environmental state have been prescribed as the Determination Standards for category 2 projects. In regard to the former, Determination Standards have been prescribed whereby projects will be subject to environmental impact assessment in cases where, based on the characteristics of individual projects, there will be a marked impact on the environment even if the scale of the project is small, and in cases where there are related projects about which there is the concern that the impact on the environment will be marked as a whole should they be conducted in conjunction even though individually the scale is small. As concerns Determination Standards based on the state of the environment, inclusion as subjects for environmental impact assessment has been clarified according to whether the project, even if it is a small scale project, will be located in any of the following types of areas: areas susceptible to environmental impact, such as areas where pollutants tend to accumulate, purely residential areas and wetlands; areas stipulated under environmental ordinances, such as natural park lands; and areas where the environment is actually declining or it is feared will decline.

### (2) Subject Scope

- 1) Items subject to environmental impact assessment have been broadened in line with the regulations of the Basic Environment Law, and not only have new items been added (greenhouse gases, waste, ecosystem and opportunities for activities which involve contact with the environment including everyday activities), but an "Others" classification has also been established in each of the environmental items based on environmental medium, such as atmosphere, water and soil, to allow inclusion in the subject scope of various environmental items which were not covered in the previous Fundamental Items which listed seven typical pollution types.
- 2) The investigation, estimation and assessment of ecosystems has been renewed, with the selection of multiple items of note from the viewpoint of predominance, typicality and uniqueness in light of the characteristics of the ecosystem, and by ascertaining the ecology, the relationship with other living beings, and the state of the habitat environment.
- 3) Consideration will also be given to the influence of environmental items on each other.

- 4) An item has been established which is classified as "environmental load", with investigations, estimations and assessment to be conducted by ascertaining the degree of environmental load (emission volume) due to waste, greenhouse gases and other pollutants.

(3) Method of Implementation

- 1) The competent Minister has indicated standard items in Technical Guidelines based on the content of general projects, reference to which allows the appropriate addition and removal of environmental impact assessment items for individual projects based on information about project characteristics and regional characteristics. Furthermore, prioritization and simplification of methods for investigation, estimation and assessment is also to be done in line with project and regional characteristics.
- 2) Clarifications have been made in regard to the timing and site of investigations, including consideration of the state of subjects about which there is particular concern regarding impact, the allocation of appropriate investigation time frames, the conducting of verification of extraordinary years in relation to observation data gathered over a long period, and the validity of assumed conditions for investigations and regional selection.
- 3) Estimations are to be conducted during a period when impact can be accurately ascertained particularly at sites where there is particular concern of impact. And, for those areas in which there is a significant change in state during the period from the time of submission to the point in time up to which estimates were made, interim estimations are also to be conducted midway during that period, the validity of estimation area selection, units used and parameters in view of the state of the area clarified, the approach to background setting clarified, and the uncertainty in estimates analyzed and assessed.
- 4) Assessments are to be conducted from the viewpoint of avoidance and decrease of impact, and from the viewpoint of conformity with environmental preservation measures, with assessments conducted from the viewpoint of avoidance and decrease of impact to be made through comparative study of multiple proposals, and with an eye to the introduction of better technology which can be applied.
- 5) The link between investigations, estimations and assessments will be fortified by conducting investigations, estimation and assessment for each item.
- 6) Care is to be taken to conduct additional investigations should new facts become evident during the implementation of environmental impact assessment.

(4) Environmental Preservation Measures

- 1) For environmental protection measures, consideration will be given to the avoidance or decrease of environmental impact, with compensatory measures to be considered according to the results of these considerations. Consideration of compensatory measures will consist of a comparison of the type and content of the environment which will be damaged and the environment which will be created.
- 2) Consideration will be given to the necessity for post-investigations according to the degree of uncertainty of estimations and assessments, and response policies in line with post-investigation items, methods and results and the post-investigation officially announced.

(5) Miscellaneous

- 1) The Fundamental Items and Technical Guidelines shall be amended as necessary based on scientific knowledge, and the Fundamental Items shall be considered for review every five years.

## Flow of the Procedure under the Environmental Impact Assessment Law

