THE PRIME MINISTER

No. 48/2008/QĐ-TTg

THE SOCIALIST REPUBLIC OF VIETNAM
Independence - Freedom - Happiness

Hanoi, 3rd April, 2008

DECISION
On issuance of Common General Guidelines on Feasibility Study Preparation for Official Development Assistance (ODA) Projects Funded by the Five Banks

(Asian Development Bank ADB, French Development Agency AFD, Japan Bank for International Cooperation JBIC, German Development Bank KfW, World Bank WB)

THE PRIME MINISTER

Pursuant to the Law on Government Organization dated 25th December, 2001;

Pursuant to Decree No. 131/2006/NĐ-CP dated 9th November, 2006 of the Government on the Regulation on Management and Utilization of Official Development Assistance;

At the request of the Minister of Planning and Investment,

DECIDES

Article 1. To promulgate together with this Decision the Common General Guidelines on Feasibility Study Preparation for Official Development Assistance (ODA) Projects Funded by the Five Banks (Asian Development Bank ADB, French Development Agency AFD, Japan Bank for International Cooperation JBIC, German Development Bank KfW, World Bank WB).

Feasibility Study Preparation for ODA projects funded by other donors may use this Common General Guidelines.

Article 2. This Decision comes into effect 15 days as from the date of its announcement in the Official Gazette . During its implementation, if encountering any differences among current regulations, Feasibility Study Preparation of ODA Projects funded by the Five Banks will be made pursuant to this Decision.

Article 3. The Ministers, Heads of Ministerial-level agencies, Heads of Government's agencies, Chairmen of People's Committees of provinces and cities are responsible for the enforcement of this Decision./.

Recipients:
- Central Committee for Communist Party;
- The Prime Minister, Deputy Prime Ministers;
- Ministries, Ministerial-level agencies, Government's agencies;
- Office of Anti-Corruption National Steering Committee;
- People's Councils and People's Committees of cities and provinces;
- The Central Office and Committees of the Communist Party;
- The President's Office;
- People's Council and Committees of the National Assembly;
- The office of the National Assembly;
- Supreme People's Court;
- Supreme People's Procuracy;
- The State Audit;
- Vietnam Bank for Social Policy;
- Vietnam Development Bank;
- The Central Committee of Vietnamese Fatherland Front;
- Central offices of mass organizations;
- The Office of the Government: Chairman, Vice-chairmen,
- Government Website, Prime Minister's spokesperson, Departments,
- Departments, Bureaus, affiliates, Official Gazette;
- Filling at: Archive of Administration Office, International Relation Department (305).

PRIME MINISTER

NGUYỄN TẤN DŨNG

TABLE OF CONTENTS
COMMON GENERAL GUIDELINES ON FEASIBILITY STUDY PREPARATION FOR ODA PROJECTS

(Harmonization of Procedures between the Government and the Five-Bank Group: Asian Development Bank ADB, French Development Agency AFD, Japan Bank for International

INTRODUCTION

In an effort to bring together the international practice and the experience in Vietnam these guidelines aim:

i) To harmonize the Government's and donors' policies and procedures in preparation, appraisal and evaluation of projects by giving general guidelines on feasibility study under international standards and meeting requirements given by both the Government of Vietnam and international donors.

ii) To serve as an effective tool to help project owners, consultants and others related to further improve the quality of project preparation documents and as a base for the planning and implementation of projects.

These guidelines define contents which should be given in feasibility studies (FS) of projects using ODA to meet the requirements of the Government of Vietnam as well as that of international donors in the process of project preparation and appraisal. They set the minimum requirements for the quality and depth of the feasibility studies.

Terms of reference for FS should be based on these guidelines. Any deviations and adjustments, which may be needed to adjust them for sectoral specific aspects, should be explained and justified.

I. SUMMARISED REPORT OF THE PROJECT

The summarised report of the project (maximum 5 pages) aims to provide necessary information in the FS including:

1. PROJECT DESCRIPTION, PROJECT PROPOSING, IMPLEMENTING AND OPERATING AGENCIES

1.1. Project description

Project description should include project objectives, components, key policies and reforms supported by the project, benefits and target groups, and lessons learned from previous projects.

a. Project objectives: State as clearly and concisely as possible the project development objective that is, the overall objective of the project. Projects should have one development objective, or at most two, ranked in order of importance. The objective should express a single development purpose that is realistic, specific, measurable, and demand-driven by the project beneficiaries.

b. Project components: In order to achieve the objective(s), various outputs should be created under the project. Describe each output and the specific actions (activities) to achieve the intended outputs, outcomes and development impact. A cluster of activities that contributes to a single project output can be grouped in one component. Project components and activities are the means by which the project development objective will be pursued. Project components may be:

- Physical (means technology, equipment, construction, etc.);

- Policy (for example, review of current monetary and trade policies,etc.);

- Capacity-building (for example, establishment of a M&E system for the development plans, reorganization of the ministry, reviews of agency mandate and function, and staff training);

- Credit (for example, rural enterprises credit, micro-finance etc.);

- Project management (for example, equipment and vehicles purchase, training, procurement advisory services, as well as monitoring and evaluation).

- Other components.

A description of a project activity should cover a definable scope of work, inputs required to complete the activity, a specified timeframe for its completion, with start and end dates and activity indicators to monitor progress. (In section 5 - Project Management, the agency responsible for each activity will need to be specified.). For a project covering various studies, the Terms of Reference for project-financed studies should be attached.

1.2. Project responsible agencies

Indicate functions and name of the relevant responsible agencies in individual states of the project:

- Project proposing agency;

- Project implementing agency (may be PMU or project owner);

- Project operating agency (may be project owner or other assigned agency).

2. PROJECT IMPLEMENTATION SCHEDULE

The project implementation schedule generally covers the whole period with the time of project start and completion and for each phase (if the project is scheduled by phases). The implementation schedule should be realistic to prevent from delays and all detailed activities should be given in the project action plan. In the project implementation schedule, it is necessary to consider the back-up plan of time.

3. PROJECT SITE

The site where the project will be carried out is to be indicated (The project map should be attached).

The project site natural conditions, technical and economic conditions will be described in details in section 3.

4. PROJECT FUNDING

All resources for the project funding should be described to ensure that the funds would be available for the project. For the project funded by the domestic resources from state budget, the funds for the project may be from central state budget, local state budget and from community contribution. For the ODA project funds for the project may be from international donor(s), from counterpart funds (central state budget and/or local state budget) and from community contribution. Indicate a justification for the use of ODA-funds.

The funds from all sources for the project should be reflected clearly with the terms of funding (grant or loan) and indicate selected modes of financing of the proposed donor (project financing, sector development program loan etc). In the case that project uses the funding from ODA re-lending loan, indicate the re-lending terms and conditions (re-lending interest rate, grace period, etc.)

II. PROJECT CONTEXT AND RATIONALE

An overview is required to explain the context for the project and to demonstrate that the project is in line with the sectoral and regional conditions and development and that it achieves relevant objectives by contributing to solve relevant problems and/or improving potential.

Although being a brief chapter only, it is of utmost importance as:

- It has to demonstrate that the fundamentals of the project are acceptable and

- It should give the readers the orientation for the rationale and details in the further chapters of the feasibility study.

To do this, the overview should include information as follows:

- The macro environment in Vietnam, which is relevant for the project establishment and implementation: political, economic, legal and social framework conditions concerning the project.

- Present natural, social and economic conditions and problems in the target region and sector.

- A clear description of the project objectives (which problems are to be solved or potential to be developed with the project), and the developmental significance of such efforts and the suitability of the project in national strategies.

- Its (inter-)relations with other previous/current/planned projects promoted by other national and international institutions.

- A demonstration of the necessity for and benefits from the project within the context of the market and of the regional and/or sectoral development plan or the socio-economic master-plan.

1. BASIS TO DETERMINE THE NECESSITY AND URGENCY OF INVESTMENT

1.1. The country's macro economy and development policies

Projects should be formed in light of the needs of economic situation of the country and in line with its national development policies. By analyzing the country's economy and development policies from various angles, the probable impacts of the project can be established and its priority in the national development plan can be clearly seen. Examine, in particular, the following points:

- Natural conditions, such as Vietnam's location, geographical features and climate.

- Social and cultural environment, such as national history, social and population structures, and the educational system.

- Current conditions and issues of the macro economy, such as growth rate, GDP, financial market, prices, the balance of payments, foreign assistance, employment, the state of poverty and natural resources,etc.

- National development policies:

+ Policies, development objectives, priority policies and targets;

+ The country's public investment program (PIP), recent investment trends for national and sectoral development, and the achievement of development targets; and

+ Development policies in the sector where the project is proposed, such as tariffs, tax and subsidies, privatization and overall investment program for the project sector, in addition to the priority of the project in the national development plan;

- Macroeconomic policies, such as fiscal and monetary policies, may significantly affect the implementation and operation of the project. Therefore, the policies that may have impacts on the project.

- Present situation regarding assistance to the country relevant; indicate existing agreements between the government and donors which are relevant to the project.

1.2. Framework Conditions and Background of the Project

a. Sector

Current conditions and issues of the sector where the project is proposed (the project sector):

- Recent overall assessment of the sector development

- National policies which encourage the sector development

- Analyzing and identifying major issues in the sector policies that may have impacts on the project

- Establishing sector institutions and functioning institutions to manage and implement their policies

- Various issues in policies, institutional, and other issues that constrain better results in the sector or in the poverty reduction

- Key elements of the sector strategies and their solutions to implementation

- Natural, social and economic conditions which need to be considered and identified as a basis to solve obstacles found

- Measures being used by the sector doing to address the current issues and obstacles

b. Region (locality)

- Natural, social and economic conditions which should be reviewed when designing the project.

- Major structural features and other project relevant conditions (e.g. environmental situation, public safety conditions, ethnic heterogeneity).

- Analyse major issues, potentials and constraints for the development of the project region/site.

c. Development, Master Plan

Review the regional/sectoral development plan or the master plan (if it exists) in order to understand the rationale of the proposed project in the context of regional or sectoral development. If there is no relevant master plan existing, make at least reference to regional/sectoral development plan.

This section includes a description and analysis of: intention, master plan, schedule, sector/regional/local socio-economic development policies; Illustrate the context of the project in the regional/sectoral development (taking into account the goal and objectives of the plan, priority of all projects within the plan, investment planning, time schedule to achieve the goals and objectives). This includes a description and analysis of:

+ The relative priority of the project in the country's national/regional economic development or sector development plan;

+ Sectoral Context and Framework Conditions;

+ Government Strategy for the sector.

1.3. Market: Demand and supply analysis

Analyze and evaluate the market, i.e. the supply and demand of product and services. The demand-and-supply analysis is a crucial factor in giving substantiation of the necessity and potential of a project as well as in determining the appropriate scale of the project and the timing of investment.

The results of such analysis provide the basis for estimating project benefits in the financial and economic evaluations of the project, therefore, carefully assess its reliability and accuracy. Each of the essential assumptions of the factors requires a solid base, which has to be given explicitly and commented in sufficient details.

The demand-and-supply analysis usually looks into both current demand and supply and forecasts for the future. First examine whether current supply is appropriate relative to actual demand by taking into account such factors as analytical approach (e.g. micro or macro analysis), past fluctuations etc at the timing of the analysis and data sources which meet such the demand above. Details are as follows:

- Factors (such as population, income, activities in other sectors etc.).

- Supply factors (regional and national suppliers of the products and services of the project as well as potential imports).

- Base and sources of the statistical data for both should be given precisely (studies, surveys, estimates, etc.).

There should be an assessment of demand and supply forecasts. The analysis of demand forecast must pay particular attention to the project region and period and assumptions, including changes in the price of output and services produced by the project, changes in the social and economic environment, and the accuracy of the basic data. At the same time, supply forecast is analyzed by taking into account the present supply situation, the extent of aging and depreciation of the existing facilities, other facilities to be constructed, and the expected import of products or utilities.

Crucial considerations:

- Main factors determining the demand for goods and services to be supplied by the project, methods to identify such factors and demand forecasts.

- The extent to meet the future demand forecasted under the development context already analyzed.

- The extent to meet the future demand forecasted with the capacities of existing agencies and under the master plan.

- The attention to population groups who do not have the necessary purchasing power.

- The estimated period of time to maintain the selling prices, equivalent to the demand for goods and services, and fluctuation rates that can happen.

Other types of analysis: Some projects such as forestation or flood control projects are not amenable to conventional supply-and-demand analysis. In this case, the expected effects of the project and their comparison with alternative plans are considered quantitatively and/or qualitatively.

1.4. Project rationale

- Existing/forthcoming issues at present and in the future or unused development potentials

and other issues that will be addressed by the project.

- Expected project effects: Examine if expected project effects (as defined in the operational performance indicators) are appropriate for achieving such objectives and goals of the project as poverty reduction, growth and environmental improvement, etc.

- The relationship between key issues of the project and relevant policies of socio-economic development in view of their specific consequences (type and scope, people affected, etc.), analyze and assess the project impacts on people's lives, the economic development or supply situation in the project region / at the project site, to avoid the case that the project can only solve less important issues which have a minor impact on the development policies.

- Solutions to current issues have been identified including issues related to unexploited potentials. The project conception, in principle, should contribute significantly to solving the identified development issues. It is necessary to examine if there are any important problem causes that would continue to exist and are likely to jeopardize the success of the project and propose what additions/modifications, if any, would be necessary when there are still some obstacle causes.

- Contributions of the project to the change in the project-relevant economic, political legal or institutional conditions, contributions of the sector or area approach.

2. PROJECT OBJECTIVES

Project objectives include:

- Concrete purposes that the project is pursuing.

- Quantity and quality of goods and services shall be produced and marketed over time by means of the capacities to be newly build up, extended or rehabilitated by the project in consideration of the existing uncertainties as to the future development of supply and demand/need as well as other aspects (e.g. adequate supply security, planning horizon, etc.). Objectives should have specific indicators which are measurable (i.e. quantity, quality and equivalent time), reflecting the project objectives and achieved results.

- The difference between the desired future situation and the one to be expected without the project.

Overall objective of the project is its contributions to implementing the national common objectives. This objective is implemented by the project benefits to the country's economy and society, the project's contributions to the overall objectives for the sector and for poverty reduction.

- The overall goal the project meant to contribute to, and which target groups it aims at.

- From the development point of view, benefits the project brings about: the project's benefits; consequential development impacts on the socio-economic development and populations as well as institutions benefiting from the project.

- Concrete indicators (quantity, quality, and time relation) which define the project goal.

3. SUITABILITY WITH AND CONTRIBUTIONS TO GOVERNMENT STRATEGY, ESPECIALLY NATIONAL, SECTORAL AND REGIONAL SOCIO-ECONOMIC MASTER PLANNING

- The relationship between the project and the master plan of socio-economic development.

- The relationship between the project and the sectoral development strategy; the project role in the context that the sector considers from the market point of view and issues related to institutions and policies.

- Specific development issues that the project mentions.

- Policies related to the project such as taxes, subsidies, trade controls, exchange rates and interest rate policies.

4. RELATIONSHIP WITH RELATED PROJECTS

4.1. Interrelations with other investment projects and previous other measures carried out by the project sponsors

Other related project could affect the feasibility and necessity of the project under appraisal. Therefore, the progress and future schedule for the implementation of such related projects are examined so that the project under appraisal may achieve its objective. Details are as follows:

- Describe how and to what extent the project will continue sectoral and regional strategy of the Donor with the Vietnamese government, and, in particular, to what extent that it will fit into the strategy pursued by previous projects or will be pursued with other projects under preparation.

- Assess results and importance of positive or negative experiences drawn from previous projects.

- Apply the lessons from ongoing and completed operations and from international best practices.

4.2. Projects promoted by other institutions with direct links with the project under consideration

- Consider other current or planned related projects that could affect the feasibility and necessity of this project, describe the interrelations with other projects (of the Donor) and previous other measures carried out by the project sponsor; The study should consider other projects, which are being planned or are in the process of implementation which may influence the outcome of the project in question. Special note should be taken of the possibilities for cooperation of these projects;

- Describe progress and implementation schedules for such related projects (if possible);

- Other projects support or hinder the project. Influence on its success. Indicate the necessary coordination;

- Interrelations, in particular, with projects of the previous technical cooperation. Consider the existing relations to improve the developmental effectiveness of the technical cooperation projects;

- Implications for coordination among various ODA projects.

In short: technical, financial, institutional aspects of the project should be related to or in line with other funded projects which are being implemented or are under preparation period.

5. PROJECT JUSTIFICATION

Describe in brief the necessity of the project both in the relevant sector and from regional perspective with reference to Government and Donor policy, the market development and the potential results of the projects.

III. PROJECT DESCRIPTION: DESIGN, RESOURCES AND OUTPUTS

This chapter addresses the key aspects of a project: investment type, the size, the location, the needed resources and their interaction in the functioning to generate output, but as well the technical

aspects of construction and implementation. This chapter has to present in detail the following topics:

- A derivation, and justification of the technological and technical aspects of a project, including a comparison with various potentially viable alternatives;

- Detailed description of the project, including the project site and technical alternatives;

- Details of the items and components of the project;

- Preliminary engineering design and analysis of technical feasibility by taking into account natural resources, materials and availability; project site conditions; infrastructure and readiness; availability of labour; and possible construction methods.

The formulation of an investment project has to include an analysis of investment feasibility; of technical feasibility presenting the basic technical solution (incl. use of land and natural resources, envisaged construction activities, kind of technology and technical equipment with basic technical parameters, standards and norms, experience from best domestic and international practices); preliminary engineering design in enough detail by explanatory statements and/or drawings to specify the use of all resources of investment and giving the base for the estimation of the duration of work and its total cost and to allow especially for:

-The relevant applications for permission for investment according to the Law of Construction and the related regulations (if relevant);

- The applications for use of land (if relevant);

- Undertaking the subsequent steps for design, procurement and implementation taking into consideration the capacity for implementation, operation and maintenance for the project.

FS has to generate and present enough information to state clearly the appropriateness, feasibility and availability of each investment factor and derive a specified technical solution.

The formulation of the project should reflect the lessons learnt from analytical work, ongoing and completed operations and international best practices. Please state in each subchapter whether there are relevant alternatives and for what reasons they are rejected.

1. SCALE

Determination of the essential project variable "scale" depends on the sector and type, on resources and demands, on technology and institutional and socials aspects. In general, almost all projects intend to satisfy some kind of demand. Thus this may be the appropriate starting point for reasoning of the scale of the project (See chapter II, 1.3). Taking into consideration potential limiting factors, as resources, capabilities, technology, an appropriate size has to be determined. This means, that the time horizon to determine the maximum output capacity should be as reasonable as the estimate of the demand, to avoid any bias for "bigness" of the project, which would not only mean idle resources but risk the viability of the project itself.

1.1. Analyze, select appropriate scale and capacity

- Define the size determining factors and analyze critically their future development in detail (products and services, markets, growth rates, other suppliers, risks).

- List the limiting factors and analyze the consequences for the determination of the project scale.

- Define production/service potentials, capacities (results), particular characteristics needed to reach the objectives.

- Describe the scale of technology (physical facilities) and/or the output of the project; The

scale of the project may refer to the scale of technology (physical facilities) or the output of the project, e.g., the area irrigated by an irrigation project, the generating capacity of a power plant project, the production capacity of a manufacturing project, etc. Distinguish clearly between input and output capacity.

1.2. Determine investment phase (if needed)

- Review the scale of the project together with the investment schedule, both of which are determined based on demand forecast and the national, regional and sectoral development plans;

- Analyze factors that may cause obstacles to the project, it is necessary to reduce the complexity of the project or divide investment into phases.

2. LOCATION AND SITE

The location of a project is determined by a wide series of variables and the assessment of these factors: Being close to the market and the customers, or the proximity of raw materials, making use of existing infrastructure or natural advantages, etc. All influential factors need to be considered for the determination of the location, including the Government's decision. Analysis should be objective and based on the decisive factor for the location choice. There should be an overview of advantages and disadvantages of other potential alternatives and reasons for rejecting.

The location and site should be analysed in details regarding the construction planning. This has to include whether there are any limitations at the site which may represent a problem for the implementation or the development of the project or of a possible extension in the future.

2.1. Key-factors for location choice of project

- General key-factors for choice of location for type of project.

- Overview of conditions of choice of location in potential areas and locations. The location options should be in line with construction planning and provide solutions to minimize the social and environmental impacts.

- Assessment of conditions and reasoning for selected location.

2.2. Analyze natural conditions, economic-technical conditions

The following points are examined for the area/region where the project is located and for all the areas affected by the project:

- Natural, administrative and social conditions;

- Means of transportation and access to them;

- Availability of labour, materials, water, power supply and other potentials;

- Limiting factors and location risk.

2.3. Select location proposal in line with construction planning and land-use planning (for project with construction) and market

Inform, whether the location and kind of project are included in the corresponding special land use plan.

FS has to state clearly that the site is adequate and available, without any limitations for the project. In case of necessary resettlement it has to be stated, that a solution has been agreed upon with the locality.

3. TECHNOLOGY AND EQUIPMENT

3.1. Choice of technology and equipment

In light of the site conditions and the scale of the project, the type of facilities proposed, the selection is considered in terms of their appropriateness from the technical and economic points of view. This section includes the following key points:

- Brief overview of technological options and alternatives, which are available in the country and/or abroad. Describe briefly the options for technical selection with data and basic charts on the technological process.

- Viewpoint, criteria and standards that are based on for the choice of technology and production process. Such exercise takes into account

+ The size, estimates of the required capacity of the facilities including profitability;

+ The operating agency's technical capability in construction and project operation (the technology chosen should correspond with the skills of the users/operators, correspond with strategies to solve problems and the choice of technology should be sufficiently linked to existing problem solving patents and skills of the people concerned);

+ Legal and technical standards and norms;

+ The use of technology appropriate to the country's technical level; “appropriateness” is a relative term: It has to be neither very traditional nor the most modern, but should reflect the result of a reasoning of the potential of technology and its requirements in the context of the local and national conditions of a project;

+ Availability of the technology;

+ Technological option analysis from economic and financial aspects, incl. requirements for O&M;

+ Technological option analysis from ecological aspects.

- Benefits and disadvantages of the different relevant options in view of the general physical design in terms of the scale, location and layout of project facilities and operating skills. Describe benefits and disadvantages addressing the corresponding aspects of technology transfer and (needed) technical assistance for the different options.

- Select type of technology and equipment. State disadvantages, if any, and acceptance reasons.

3.2 Basic design of technical solution

This sub-chapter refers to the aspects of equipment and technology only. It is needed, to lay down the base for the following chapter 3.4. on generation of output/production. Construction aspects are covered in chapter 3.5.3.

Basic design in technical and technological terms during project preparation shall meet 3 requirements as follows:

- Defining the functional relationships between various technological processes and stages of production, including flows of material at different production stages;

- Giving the base for the total cost estimation;

- Giving the base for the next project implementation phase.

Content of general functional design comprises general layout of system including principle project's components, component's layout and basic engineering solutions. The component's layout would define the principle physical features of the component and relationship with one another or other projects.

Basic design in terms of technology and equipment essentially comprises:

- Configuration of equipment and production processes;

- Configuration of material flows and linkages between different stages of production.

The layout and basic design at FS level should comprise charts and drawings. The details of functional and general layouts depend on specific components, aiming at providing the basis for calculation of the total investment cost of the project (or of the option). The layout and basic design should include:

- Site layout indicating the position of major equipment, transport facilities, water supply, power supply, gas and other utility and service facilities, and areas for future expansion;

- Location of main equipment units: input and output loading areas, electrical and control equipment, auxiliary facility locations, repair, car park, storage, research and development facility etc.;

- Material-flow diagram, showing the flow of main material, main input and output, main intermediate and main final products, through various sections of the plant;

- Physical layout for transport, utility (electricity, water, sewage) lines, linkages and communications facilities;

- Areas for extension and expansion.

4. GENERATION OF OUTPUT/PRODUCTION

As any project shall generate some output, this chapter has to be addressed also in case there is no material production of goods or services. In such cases, describe the current output of the project when in operation, and its needed inputs, infrastructure and research.

4.1. Overview: Determination of output / production programs and service

Describe the type of facilities in terms of their appropriateness from the technical and economic perspectives

- Technical components of the project

- The basis for selection of the components

- For each component, the principal target group and the main project-related outcome for that group

- For each component, state the key inputs and outputs

- In relation with the sector issues mentioned in chapter II, state the issues to be addressed through the project and the solutions.

4.2. Process of output generation / production and generation of services

List and specify in detail technical and quality standards of products (characteristics of group

and kind of products and services to be generated by the project).

A quantitative flow-chart should illustrate how the different inputs and the equipment are used to produce the goods or to generate the services.

4.3. Determine needed inputs and supplies factors

- Labours (quantity by category, required qualifications and skills; availability; training and qualification measures needed).

- Raw materials (types, quantities, qualities, availability and procurement risks; alternatives and substitutes).

- Auxiliary materials (e.g. packaging) and others.

- Materials for routinely maintenance and provisions for repair.

4.4. Availability of needed infrastructure

- Energy (types, quantities, availability and reliability).

- Water (quantity, availability and reliability).

- Transport (types, quantity, availability and reliability).

- Communication (types, availability and reliability) and

- Other social infrastructure e.g. waste treatment systems, labour safety systems, fire fighting systems (types, quantity, availability and reliability).

- Necessary measures to improve the infrastructure and/or own activities to provide for the needed services.

4.5. Research and development

Define and evaluate the need for training and research and development. Describe research and development and training to serve the generation of products and/or services.

5. CONSTRUCTION AND SITE

5.1. Options for specific site compatible with the construction planning

Results of the relevant surveys (geological, bathymetric/hydrographic, altimetric) and their implications for the construction options for the site.

5.2. Architectural options and construction solutions

5.3. Basic designs in construction aspects

The basic design for construction at the stage FS shall meet three requirements:

- Proposing technical solutions, stating their technical feasibility, safety and reliability.

- Allowing an estimation for the total construction cost.

- Being a base for the next phase of the project.

FS fulfills these requirements by a basic design. Explanations on the basic design shall have the following contents:

- The characteristics of the total ground area; the plan on lines of works, for works to be constructed in lines;

- Architecture master planning for the works required architecture;

- The scale and area of the building works and the items (number, size, characteristics like main material and structures). Focusing on the main works and general basic information about adequacy of terrain, site clearance, technical infrastructure and technical issues (see 3.3), size, architectural design;

- The general plan on fire and explosion prevention and fighting, lighting condition and environmental protection; the general technical system and the general technical infrastructure system of the works and points of connection with the technical infrastructures outside fences;

- The description of load and impacts on the works;

- The list of applicable rules and standards;

- The proposed solutions shall be presented on illustrative drawings in the appropriate scale; the drawing shall be only in such detail to illustrate the technical feasibility and ensure that the total cost estimations following the general functional design are in acceptable accuracies. The basic design illustrative drawings shall be shown with major dimensions, including:

+ A map of the local region with an indication of the project area and its topographical characteristics and terrain conditions;

+ Characteristics of the total ground area, the plan on lines of works, for works to be constructed in lines: an overview map of the project ground indicating the construction areas, transport network, the infrastructure connection points as well as the greenery area and open space;

+ The drawing of the architectural plan, for works with architectural requirements: illustrative sketches of the major buildings with major dimensions (extensions and heights) and volumes; relation of buildings to technological lay-out and diagram (see 3.3.2).

- Civil engineering works should be detailed for cost estimates and implementation scheduling. The nature of each construction should be defined, including modular construction where appropriate, the quantity of construction materials and the quantities and cost of materials required.

- Others: define fixed items and items that can apply better optional technical and economical alternatives (if any) during project implementation. Define survey requirements to be done during next phase.

6. LAND ACQUISITION AND RESETTLEMENT PLANS

When the project involves land acquisition, resettlement, and compensation, prepare land acquisition and resettlement plans to ensure the project implementation progress. The land acquisition and resettlement plans should review necessary procedures with adequate environmental and social considerations, including:

- Scope of land acquisition and resettlement impacts;

- Legal framework and entitlement policy;

- Compensation policy;

- Institutional arrangements;

- Preparation of subproject for land acquisition and resettlement action plans;

- Public participation, consultation, and grievance mechanisms;

- Implementation schedules;

- Budget;

- Monitoring and evaluation.

In case there are already separate land acquisition and resettlement plans available, please provide all relevant information from this in a summarized manner.

7. ENVIRONMENT

7.1. Environmental criteria and standards

Indicate the environment criteria and standards used for the design of the project in terms of technology, processes and construction.

Indicate the measures to mitigate the environmental impacts during the detailed design and construction implementation period.

7.2. Management solutions for environmental protection

Describe the environmental requirement during operation and maintenance of the project.

Indicate measures and arrangements to comply with the environmental protection norms. Conduct environmental monitoring and management based on the appropriate environmental management plan in the EIA.

IV. TOTAL INVESTMENT, FUNDING STRUCTURE, FINANCIAL SCHEDULE

Based on the basic design and technical solutions defined in the earlier chapters a detailed cost estimate can be prepared. The preparation of project costs is one of the most important elements of project planning, and is the basis for the financial plan and financial analysis. It is essential to work on common shortcomings of project work: underestimation of cost, lack of accurateness, application of an incomplete cost grid, wrong unit prices, omission of contingencies or optimism bias of the project planners. This can lead to shortages of funds that may impede project completion.

Thus, accurateness and reliability of the cost estimate are essential. The efforts and the necessary work to achieve these depend much on the complexity and novelty of the project. In general, standard projects in a well-known environment can make full use of the (most recent) experience of similar projects, meanwhile projects in complete new surroundings may require some kind of tests and investigations, e.g. of soil conditions for construction or transport project, to come to a solid base for a reliable cost estimate.

In this step, projects should be broken down into its components, sub-components and items, to prepare for each of them a separate cost estimate based on the type and number of inputs needed and using their individual unit prices. Based on the separate cost estimate, the project planners estimate the total project cost, including foreign and local currency components as a base for a proper financing plan.

Key factors to be considered for total investment cost planning:

- The estimated total costs of the project should include working capital (for production project), interest during construction, as well as adequate contingencies for price increases and unforeseen costs. The specific project cost should be compared with that of similar projects.

- The adequacy of the total funding of the project and the adequacy of domestic fund contribution. The budget of the country or of the project sponsor should be given adequate precautions to ensure sufficient, timely provision of funds. Local cost financing if required should also be taken into account.

- The appropriateness of the financing plan in light of the project cost and the implementation schedule.

- The costs not covered by the ODA loan should be adequately budgeted.

1. TOTAL INVESTMENT CAPITAL COST

1.1. Composition of project cost

Project cost consists of various items, depending on the type of project. The cost of each item should be carefully estimated based on basic design, technical characteristics, services required and appropriate unit price.

The project cost is generally broken down into the following items:

PROJECT COST ITEMS		
1	Land acquisition (and/or compensation)	The cost of land acquisition and compensation, depending on the type and scale of the project. The cost of this item should be estimated in details especially when the project involves large-scale involuntary resettlement. Costs for improving infrastructure at the relocation site and for environmental measures, such as conservation of cultural heritage and protection of wildlife, may also be included.
2	Construction and civil works	Plant structure and construction works (construction materials, construction machinery, etc.)
		Construction services and/or labour
		Fuel, transportation and others
3	Goods and services	Machinery and equipment and auxiliary material
4	Project implementation management costs	Any costs relating to project implementation management (costs of PMU...) excluding consulting services and other hired external services.
5	Consulting services	The cost of consulting services should be estimated based on the assignment schedule for experts. The cost should be broken down into remunerations and direct costs (equipment, training, etc.).
6	Training and other costs	Training costs refer to costs for the participants and/or to other training costs not covered under consulting services of project implementation management items.
7	Taxes and duties	Taxes and duties directly related to the investment

8	Interest during construction	Interests shall be calculated separately on the base of actual interest rate for domestic and/or external funds.
=	Total Base Cost	
9	Contingencies	Physical contingencies: provision for increase in physical works (quantity of work, amount and type of equipment, method and duration of implementation) due to unforeseen factors; depends on the nature of the project.
		Price contingencies: provision for an increase in prices after cost estimate based on the trend of price indices. The longer the project implementation period, the more exposed is a project to such price increases in the domestic and foreign markets. Price contingencies are applied to the base costs plus physical contingencies and calculated separately for local and foreign expenditures. Starting point for the calculation of Price contingencies after commencing the contracts has to consider the relevant Vietnamese regulation.
10	Working capital (manufacture project)	To start operation of a project, a certain set of materials is needed as well as funds for the administration and maintenance of the start-up phase.

1.2. Calculation of project cost

The accuracy and appropriateness of the project cost physical items should be checked stating clearly and reviewing the methods used for estimation of items, specifications and quantities of goods and services required.

Costs are prepared according to cash expenditures. The calculation of the individual project cost has to take into consideration the following aspects:

- Regulations and norms: in accordance with relevant legal documents (laws, decrees, etc.) stipulating how the cost of certain items has to be calculated.

- Market prices and cost norms: Cost estimates should reflect the real cost for the project to be expected under the prevailing economic conditions. Once available, the actual market prices should be applied. If required by regulations, additionally estimates on the base of cost norms have to be presented. Possible deviations in the total result between the two approaches should be explained, exceeds of the cost norms and their necessity for the execution and success of the project be justified to allow for an approval.

- Currency: items may be purchased domestically or imported from abroad. They should be valued according to their actual currency quotation and then calculated in the preferred currency of the cost estimate according to the actual exchange rates versus the original currencies, which have to be stated explicitly.

It may be useful, to offer an overview in a table, on the methodology for the used sources and bases for the individual cost estimate scheme:

COST ESTIMATE: OVERVIEW OF METHODOLOGY					
	Cost Item	Applied Regulation(s)	Market Prices / Cost Norms	Currency base (Domestic /Foreign)	Exchange rate
1	Land acquisition and compensation				
2	Construction and civil works				
3	Goods and services				
4	Project implementation management cost				
5	Consulting services				
6	Training and other costs				
7	Taxes and duties				
8	Interest during construction				
9	Contingencies (Price)				
	Contingencies (Physical)				
10	Working capital (manufacture project)				

1.3. Applied unit prices and ratios

The characteristics of the various projects vary widely. However, some of the methodological aspects are rather much the same. The following table can give only some general overview, on the best practice for unit prices for reference:

COST ESTIMATE: SOME REMARKS ON UNIT PRICES AND RATIOS		
1	Land acquisition and compensation	Prices for land acquisition or long-term lease in the market or legal norms for land acquisition and/or compensation.
2	Construction and civil works	Plant structure and construction works (if not turn-key project, then broken down by construction materials, construction machinery with unit prices for materials, rent for machinery etc); Labour: actual wages, wage norms; Fuel, transportation and others: actual prices.
3	Goods and services	Market quotations or most recent experience in other similar projects for (similar) type of item; these have to include the cost for transport, packaging and insurance to the project site.
4	Project implementation management cost	These should be calculated on an actual base.
5	Consulting services	Based on the scheme set by the relevant regulations of Vietnamese Government and the potential donor(s), monthly/weekly/daily fees and allowances should be stated explicitly.
6	Training and other cost	Cost for training by the supplier or another external institution should be on actual base; this includes cost for the participants, the equipment and the trainers (avoid double counting with consultants).
7	Taxes and duties	Taxes and duties should be stated according to the prevailing laws. In case the project may enjoy any tax or duty exemptions, the reason should be given explicitly and evidence should be provided.
8	Interest during construction	
9	Contingencies (Physical)	Contingencies will vary widely by sector and type of project. Thus the following add-on ratios for the physical contingencies can give only some very rough orientation as a rule of thumb: - Precisely definable civil works and repetitive, standard equipment: 5-10%; - General civil works and equipment: 10-15%; - Civil works in more difficult terrain, more complex plants and equipment: 15-20%. In some exceptional cases, where testing may not be possible (e.g. tunnels under deep rock) much higher ratios may be reasonable.
	Contingencies (Price)	Price contingencies shall cover the expected local and international price increases for project cost items and shall be calculated annually and accumulated over the implementation period. In many cases this can be done by using the expected rates of domestic and international inflation, assuming that the prices of project items will increase in line with them. However, there may be a substantial deviation of project cost items from this general trend. Then, such additional price increases should be taken into the calculation.lf the contract will be awarded on a base price with a formula for price escalation, this formula shall be used to calculate the price contingencies.
10	Working capital	Cost of all inputs (labour, material, fuels, auxiliaries, etc.) of a production cycle.

1.4. Corresponding time table for monetary needs

As cost will incur according to the progress of implementation, a timetable shall be elaborated to present the proportionate cost by the corresponding years, divided by local and foreign cost, based on a detailed estimate of the implementation plan of the project (See Chapter 5.3).

2. FUNDING

2.1. Type of capital sources

Potential sources and types of contribution to finance the cost are:

SOURCES AND TYPES OF CAPITAL				
Category	Source / Institution	Type of Capital		
		Equity	Loan	Grant
Project operating agency		☐		
Government	National/ Local	☐	☐	☐
ODA	Multilateral development agencies		☐	☐
	Bilateral development agencies		☐	☐
Financial sector	(International) promotional banks	☐	☐	
	Commercial banks		☐	
	Venture capital funds	☐		
	Institutional investors	☐		
	Foreign export credit agencies		☐	
	Suppliers of equipment	☐	☐	
	Capital market	☐	☐	

The availability and adequateness of the diverse funds with their different conditions vary widely with the type of project. However, as a project shall be financially viable thus generating a return on the investment, even projects, which in the past did not attract private financiers like infrastructure, are nowadays the objects of project financing. Thus, the availability and willingness of private investors to participate in the investment should be checked beforehand, to assure that the scarce funds from Government and ODA are only applied for to the indispensable amount.

For the use of Foreign Sources, the exchange risk has to be analyzed and addressed.

2.2. Proposals for mobilizing capital sources

After studying the financial soundness and financing procedures of such sources and evaluating whether the funds required will definitely be available for the project, a detailed proposal should be prepared, covering all the investment cost to ensure the implementation of the project.

When co-financing with a multilateral or bilateral financing institution is planned, review the progress in negotiations with such co-financing institutions and the (maximum) part of the project cost covered by funds provided by them; consider that some items, such as land acquisition and compensation, taxes and duties, administration costs of the Operating Agency are generally financed by domestic counterpart funds.

Please give justification why ODA funds should be used rather than local funds; Indicate the advantages of using loan/grant from a particular donor and the main conditions for using the proposed loan and indicate whether they can be accepted or not. Please indicate selected modes of financing of the proposed donor.

The funding arrangements should be planned so as to ensure that costs which will not be covered by the ODA loan will be adequately funded from other financing sources, such as central state budget or local budget, the Operating Agency's internal funds, borrowings from commercial financial sources, or loans or grants from the prospective co-financing institution(s).

The financing criteria of the each of the co-financiers, especially the donors should be stated completely (terms, grace period, interest rate, fees, currency):

SOURCE AND CONDITIONS OF FUNDS								
Source	Currency	Amount	Maturity	Grace Period	Interest Rate	Fees	Currency Risk	Remarks
1:								
2:								
3:								
..								
..								

When the proceeds of the ODA loan are to be on-lent through an (financial) agency or institution, ascertain the re-lending mechanism, the entity which will bear the foreign exchange risk and the proposed terms and conditions of sub-loans.

2.3. Preliminary financing plan for the project

Examine whether the financing plan for the project, i.e., annual funding requirements and budgeting, is adequate in light of the project cost and the implementation schedule, paying attention to whether foreign and local currency requirements are appropriately estimated and allocated for each year and whether adequate contingency funds are allocated for each year.

2.4. Working capital and O&M cost and corresponding financing mechanism

The working capital of operation should be part of the estimated investment cost and therefore included in the capital cost financing scheme. It should be noted that the need for working capital usually increases with the operation.

Cost for Operation and Maintenance are usually treated in the Financial Analysis. In some cases projects do not generate cash revenues in sufficient extent or not at all to cover O&M properly, putting in risk the viability of the project. In such non-revenue cases, it must be stated clearly where

funds for operation shall come from: budgetary allocation from central or local budget, owner's capital, or grants from donors.

V. PROJECT IMPLEMENTATION AND OPERATION MANAGEMENT

This chapter shall give the detailed information about the project implementation and operation management arrangement, including clear descriptions of the project:

- Implementation management: the project management structure and staff capacity.

- Stakeholders: participants in the project implementation and management and their role in the project.

- Detailed and realistic implementation schedule: All the activities will be listed with the timing for starting up and completing.

- Financial mechanism to ensure that all financial resources will be available for the project. The accounting, financial reporting and audit arrangements and disbursement mechanisms applied to the project are described clearly.

- Procurement management.

- Operation and operational management arrangement.

1. MAIN FACTS ON THE PROJECT IMPLEMENTING AGENCY

1.1. Institutional features

-Legal Aspects: Legal foundation, Influencing regulation, Legal Form and Status, Autonomy, Purpose (Profit/Non-profit).

- Organization: Set-up (Chart), accounting system, Information Technology, Internal Control, Management and Staff, Rewarding, Training.

- Experience with similar projects (number of projects, average size, funding sources, financiers).

1.2. Operational and financial aspects

- Products (if any) and Services: Types, Sales (if any), Customers, Prices and Tariffs (if any).

- Facilities.

- Type of accounting (cash/accumulative, budgetary/commercial).

- Sources of Funds, Annual income and expenditures.

- Assets and Liabilities, Balance sheet (if any).

2. PROJECT IMPLEMENTATION MANAGEMENT

2.1 Project organization and implementation

Describe the mandate and role of each agency and its specific responsibility in project implementation, for each activity (attach organization chart). Assess the implementing agencies'

capacity to carry out the project, including agreed procurement and financial management capacities, to achieve development objectives. If there is an overlap in responsibilities, state the alternatives for solving conflicts that may occur due to the overlapping responsibilities. Assess if the proposed implementing agency has sufficient human and financial resources, necessary experience and capacity to successfully implement the intended activities of the project. If not, indicate solutions (human resource training, technical and management assistance etc.)

2.2. Project management and staffing

Define entities involved in project implementation and approach to mobilize related entities for the project implementation. Outline the proposed administrative structure of the implementing agency either being the project owner or an assigned PMU, functions and responsibilities of the project owner/PMU; objective, characteristics, capability, managerial, technical and financial experiences of the implementing agency. Detailed job descriptions for key positions, coordination among implementing agencies and between implementing agencies and operating agencies are necessary.

Key positions should be filled during project preparation to ensure maximum continuity from preparation work to actual implementation, even if staff is not brought aboard full time until after approvals are in place. To avoid start-up delays, a core staff should be in place and trained prior to project launch.

2.3. Role of contractors

Role of contractors in project supervision and implementation supervision, providing goods and services supply, civil works is to be clarified. The monitoring and evaluation of performance of contractors by project implementers should be stated.

2.4. Role of consultants

Role of consultants in providing technical assistance services, building capacities to project management units and management and supervision staff should be clarified as should be the supervision over their performance by project implementers. For the consultants involving in the supervising quality of civil works, the role and responsibility to the quality of work supervised by them should be clarified.

2.5. Role of other organizations and project participants

Clearly define the role of other related government agencies, non-governmental organizations (NGOs), and project participants. Discuss broadly based consultative processes; define selected types of decisions to be taken; define who will take the decision, who will review it, predict potential controversies and alternatives for solving the controversies.

2.6. Role of key financiers and co-financiers

For ODA projects involving co-financing, describe (a) the role played by the co-financiers, (b) the type of co-financing (joint or parallel), (c) the procurement guidelines applicable for co-financed components, and (d) any incompatibility issues (procedures, rules, or documents) arising from co-financing.

2.7. Coordinating mechanisms

Describe the mechanisms - both formal and informal - that will be used to develop clear

communications and effective coordination among all project participants. If project Steering Committee will be established to play the role of Coordinating body, include the structure of the Steering Committee with all members and the mandates given to each member (specific person may not be assigned, but at least mention the name of the organization).

3. PROJECT IMPLEMENTATION PLAN

Prepare a detailed and realistic implementation schedule. Completion of this task requires a thorough understanding of the operational implications of the project activities: Carefully think through the timing and sequencing of specific actions set out in the project description, in consultation with experienced personnel who have expertise in the implementation of comparable activities in a similar context. Identify all important actions regardless of whether they involve direct financial costs.

There are several techniques to elaborate and present an implementation plan, from simple bar charts showing the sequence of events to Gannt chart critical path analysis to highlight crucial activities that must be completed before others can commence. Depending on the complexity of the project, an appropriate technique should be selected. Define time and sequence of main activities (procurement, disbursement, site selection, site clearance, agreed action plans, legal activities, technical assistance, sector structure adjustment, dissolution, privatization, appointment of auditors, staff training, etc.) and allocate sufficient time for implementation of those activities with appropriate resources and capacity.

- Revising and updating: The initial implementation schedule should be a flexible guidance for future actions and revised and updated regularly. As the project progresses, the validity of the implementation schedule should be assessed continuously and changes should be made to reflect the emerging realities. The preparation of the annual action plans is the basis for adjustment of the overall schedule.

4. FINANCIAL MANAGEMENT

Provide detailed information on the arrangements by which you will ensure that the finances of the project are effectively and accurately managed and monitored. These include financial plan, accounting, financial reporting, and audit arrangement; taxes, administrative arrangements for disbursement; budget approval and disbursement mechanisms; on-lending flow and terms; revenue generation and loan recovery; and co-financing.

4.1. Preparation of financial plan

Financial plan should be in consistency with the current regulation on the financial management of Vietnam, and for the ODA projects, with the commitments between the government and the donors. The content of the financial plan covers the amount of funds, sources of funding (from the state budget, from donors' grants or loans, from state credits, from the funds of enterprises, from community's contribution, etc.). The budgetary needs of the project should be estimated for at least the first year in accordance with the current regulations.

4.2 Accounting, financial reporting and audit arrangements

Describe accounting, financial reporting, and auditing arrangements in as much detail as possible, including (a) maintaining separate project accounts and internal controls, (b) providing timely financial reporting, and (c) arranging for project or corporate audits.

- Maintenance of accounts and controls: Set out the agreed standards and format to be used for

the submission of financial statements and reports. It may be necessary to employ a consultant to assist in building a financial management system.

- Financial reports: include both financial statements (usually comprising an income statement, a balance sheet, and sometimes a sources-and-uses or cash flow, statement) and other types of financial information.

- The audit process: Set out the arrangement for financial statements to be audited annually in accordance with the donor(s)' and the government guidelines by an independent (but not necessarily private). Key elements of an audit include:

+ Assessment of the adequacy of the accounting and internal control systems for expenditures and other financial transactions to ensure safe custody of project-financed assets.

4.3. Budget approval and disbursement mechanisms

In order to ensure the adequate budget and in-time budget release, the study should describe the budget approval procedure and timing, any expected problems and how they will be addressed, temporary borrowings or other mechanisms will be used to bridge the gap of funds.

4.4. Retroactive financing

For some donors the retroactive financing mechanism is applied to accelerate the project implementation. In these cases, outline the need for any retroactive financing in sufficient detail that participating agencies understand which expenditures are authorized for retroactive financing and how they will be financed in the interim period before the replenishment from donors. The agency, which is responsible to provide the counterpart funds, will be responsible to this advance.

5. PROCUREMENT AND PROCUREMENT MANAGEMENT

5.1. Procurement procedure

The procurement of works, plant & equipment and professional services for implementation of a project should be defined in line with the existing legal regulations and the requirements of the funding sources. This includes:

- Statements and justifications on the procurement guidelines used;

- The envisaged procurement procedures;

- An (indicative) tabulation of procurement packages and

- Comments on the main procurement risks, which may have impacts on the project.

Procurement should make full use of the competition in the market for the benefit of the project. If the benefits of full-scale international tendering do not come without a cost especially in terms of time, bidding restrictions and/or limited tendering may make be adopted. In such cases and any other limitations of tendering, state explicitly and justified in detail by their benefits and risks for the project.

If there is no turn-key concept and/or procurement is split up into several packages, the criteria for the packaging of lots should be given in detail as should be the cost and risks of such a procedure.

Describe the differences between the government's and donor's procurement procedures, if

any, and confirm that the procurement relating provisions agreed in the international agreement or loan agreement will be followed.

5.2. Procurement management and proposal for a procurement plan

To prepare a proposal for procurement plan, analyze all of the items to be purchased and determine which items should be grouped together into contracts (for example, for bulk purchase). Identify what procurement methods will be applied for each contract. Normally, the definite procurement plan can only be determined after FS, when design has advanced sufficient to allow for a determination of all tendering lots. Thus, the proposal for a procurement plan is subject to revision after project investment decision. The following information should be given:

- The proposal for the procurement plan prepared with adequate content as required by the Law on Procurement. (The key information of the proposal for the Procurement plan: items procured through competitive bidding, For the packages procured through competitive bidding, the procurement plan needs to specify the information such as: Name of the package, Price, sources of funding, bidding methods, bidders selection methods, contract implementation forms and timing).

- Responsibilities of each unit within the implementing agency involving in procurement approvals.

- External entities to this agency that need to endorse the award (and contract).

- Problems likely to be encountered.

5.3. Contract management

Describe arrangements for monitoring and supervising contracts and the human resources devoted to this task.

6. PROJECT OPERATION: INSTITUTIONAL ARRANGEMENT AND PLANS ON MANAGEMENT

6.1. Main facts on the project operating agency (if different from Project Implementing Agency)

Describe the institutional features relating to the project operation.

- Legal Aspects: Foundation, Location, Legal Form and Status, Autonomy, Purpose (Profit/Non-profit).

- Organization: Set-up (Chart), accounting system, Information Technology, Internal Control, Management and Staff, Remuneration, Training.

- Experience with similar projects (number of projects, average size, funding sources, financiers).

Operational and financial aspects.

- Products (if any) and Services: Types, Sales (if any) Customers, Prices and Tariffs (if any).

- Facilities.

- Type of accounting (budgetary/commercial, cash/accumulative).

- Sources of Funds, Annual income and expenditures.

- Assets and Liabilities, Balance sheet (if any).

6.2. Transfer process from implementation to project operation

Describe the mandate and role of each agency and its specific responsibility in project operation. Define the human resources to be appointed to the key positions, technology and skills to be transferred to the project operators, approach applied to the technology and skills transfer.

Plan on management of the project operation consists of the following information:

- The coordination mechanisms to be applied between the project operators and between them and the project operating agency;

- The time the project outputs delivered to the project operators;

- The key outputs which will be delivered to the project operators;

- If the staff involving in the project implementation continue to participate in the project operation;

- If no, the approach to be applied to technology and skills transfer to the project operators;

- The role of contractors in providing instalment/technology transfer and training on the equipment/machineries operation to the project operators and civil works maintenance.

6.3. Management and responsibilities for project operation

Explicitly describe Management and Personnel (of Project Operation Unit): Organizational set-up; staff to be appointed to the key positions (no specific name, but Qualification and Experience of Key Personnel). Provide technical information on operation: Production/Service, Maintenance and Repairs. Financial/Commercial: state accounting and financial management mechanism, in case of commercial projects, state Sales (if any) and Customers, Prices and Tariffs (if any) of project output.

VI. PROJECT OUTCOMES AND IMPACTS

This chapter shall give detailed information about the medium and long-term results that are expected to be created by the project and how they are monitored and evaluated. To do this, the chapter should include information on:

- The project investment efficiency: social and financial benefits expected to be from the project and costs born by the project;

- The project social impacts on the poor, minorities and indigenous people. If the project involves resettlement, what are the mechanisms to provide compensation to the affected;

- The project environmental impacts and measures to be applied under the project to mitigate the impacts;

- The project risks and controversial aspects;

- The project outcomes and impacts monitoring and evaluation, the performance indicators, evaluation and reporting arrangement.

1. PROJECT OUTCOMES AND IMPACTS MONITORING AND EVALUATION

Explain how you will both monitor and evaluate the project. This will include performance indicators, major loan covenants, and project evaluation arrangements.

1.1. Performance indicators

Identify the tools to be used to reflect performance. Describe both development impact indicators and progress indicators.

- Key development impact indicators:

List the fundamental "development impact" indicators, or longer-term objectives of the project. These indicators should be defined as an integral part of the development of project objectives. These indicators should be specific, measurable, affordable, relevant and time-bound.

- Progress reports and indicators:

List the policy, physical, financial, institutional, environmental, resettlement, and other progress indicators that will be monitored. In selecting indicators, however, bear in mind the practical constraints imposed by staffing and budgetary limitations and the difficulty of maintaining the data. To be manageable, the number of indicators should be kept modest and consistent with institutional capacity. If available, attach as annexes the monitoring formats for quarterly reports. (Keep in mind, however, that designing a good management information system is a process that is likely to continue throughout project implementation.).

A clear distinction should be made between (a) "input" indicators, (b) "output" indicators, outcome indicators and (c) impact indicators.

- Institutional arrangements for monitoring and evaluation, including (a) need for external contracting of baseline and post-evaluation surveys, (b) use of technical assistance or consultants, (c) staff capacity building and training, (d) technical performance audits, and (e) related details. Consider defining methods to be used and responsibilities for data collection related to monitoring. Any baseline and post-evaluation-surveys in particular will need early attention to their design to be useful.

1.2. Major loan covenants

For many ODA project various loan covenants are agreed to be fulfilled during the project implementation process. In that case, prepare a table that summarizes the key legal covenants. This table is usually suitable for extraction and use in regular quarterly reports and in the project status reports of the donors prepared after review missions. Because it is important that donor and government staff discuss regularly and clearly the performance on these key actions, it is useful to use the same or similar tables for monitoring purposes.

Key, time-bound actions that must be taken by the government to ensure successful implementation and Fiduciary accountability are generally included in the legal agreements. These covenants entail measures to ensure the success of the project and sustainability of its benefits. The covenants may be classified into the following categories:

- Accounting and audit.

- Financial performance and revenue generation from beneficiaries.

- Flow and use of project funds.

- Counterpart funding.
- Management aspects.
- Environmental covenants.
- Involuntary resettlement.
- Indigenous people.
- Monitoring, review, and reporting.
- Project implementation.
- Policy, regulatory, and institutional matters.

1.3. Project evaluation arrangements

Describe the arrangements for evaluation of the project. This is not the same as monitoring. Evaluation is generally undertaken following project completion after project benefits have been realized. It may also be undertaken midcourse, however, to guide any midcourse corrections that may be needed.

1.4. Monitoring and reporting arrangements

Summarize reporting arrangements, including both intra-governmental and to the donors (in the case of ODA project). The reports to be submitted are quarterly (or semi-annual) and annual reports, a midterm review report, and an Implementation Completion Report (ICR). Periodic reports may also be prepared to address specific issues arising during implementation.

2. INVESTMENT EFFICIENCY: ECONOMIC AND FINANCIAL EFFECTIVENESS/ BENEFITS

Financial analysis calculates the total financial cost of a project and the recovery of these costs from the viewpoint of an individual unit. It allows to determine unit cost, cost recoverage, liquidity and investment return as indicators of financial viability and investment efficiency. It is based on the complete actual cash flow.

Economic analysis is different from financial analysis as it takes additionally into consideration cost and benefits beyond the cash flow of the individual unit to the viewpoint of the national level, to make a cost-benefit analysis trying to compare the complete economic situation with and without project to determine the additional benefits attributed to the project as well as the additional cost caused by it for the whole country. This can be a rather complex procedure, involving the use of opportunity cost and shadow prices and a different treatment of transfers like taxes and subsidies.

2.1. Financial analysis

2.1.1. Financial profitability (for economically viable project)

The analysis should be done in real terms, i.e. prices of the base year without inflation. In brief, the following steps should be carried out during this process:

- Determine the total time horizon and the number of periods (usually 10 20 years).
- Make use of the analysis on the scale (chapter III.1) and cost (chapter IV.1) of the project

complete a table of all capital cost and assign them to the corresponding periods. Determine the remaining value of capital assets at the end of the time horizon, as this is considered revenue of the project.

- Make a forecast on the demand for the project's outputs (see chapter II.1). The following elements may be to taken into consideration: the determinants of the demand for the goods and services of the project, the role of prices and tariffs of the products on the demand, elasticity of demand on price changes, purchasing power; sensitivity of demand on changes of the income, competitive alternatives to satisfy the demand; demand satisfaction capacity of the project, quantities, prices and values for each product in each year, to determine the revenues of the project, etc..

- Make use of the analysis of the production process (chapter III.4) determine the current cost (fixed and variable) on the base of the salaries and prices to be paid for all inputs.

- Complete the cash-flow for all years to enable the calculation of the financial viability, i.e. to check whether there is enough liquidity in each year to cover the corresponding cost; to determine the degree of cost recovery as well as the financial gap, which may have to be covered by other means; to calculate the financial efficiency of the project in terms of (long run marginal) cost per unit of output (especially in the case of non revenue generating project), some kind of revenue/cost ratio, or in the form of investment returns in the form of the net present value and/or the financial internal rate of return (FIRR) as indicator of financial profitability.

- Financial analysis should be completed by a sensitivity analysis to determine how these ratios react on changes in certain assumption, e.g. increase in investment cost, lower demand, changes in exchange rates, etc..

- These figures have then to be compared to the (minimum) criteria for investment of the investor, donors and Government and to be checked whether they justify the investment from the financial point of view.

2.1.2. Liquidity: Preliminary financing plan for the project

Complete the financial plan from the implementation with the data from operation phase as mobilizing the resources for the payment of the investment cost is only one part of the task of financing. The other part is to structure the financing in a way that the project can fulfil its financial obligation to the investors and creditors in the future without problems. This requires that the future repayment and interest obligations are within the limits of the future surplus generated by the project.

2.2. Economic analysis

The economic analysis goes beyond the level of financial analysis, widening the circle of benefits and cost to the national level and their category beyond the mere financial dimension. In practice however, to determine the economic rate of return the economic analysis starts with the scheme of the financial analysis, making certain adjustment in the calculation procedure:

- Eliminating transfers like taxes and subsidies (as these cost/revenues at the individual level are revenues/cost at the national level, thus being neutralized in a national perspective).

- Adjusting prices and unit cost, if these do not reflect the economic cost due to distortions in the market as a result of regulatory measures or monopolistic practices, making use of accounting/shadow prices. However, the need to make use of these corrections has decreased with the

increasing liberalization and growing competition all over the world, as in most cases market prices reflect more or less the economic value. Thus, only if there is a clear and substantial deviation, this method should be applied with explicit calculation and justification of the shadow price.

- Adding certain externalities which are beyond the confines of the project, but are relevant from a wider perspective as external revenue or external cost; the latter may be rather significant in the case of pollution and/or congestion and should then be included in the economic analysis.

After these adjustments, an economic internal rate of return (EIRR) may be calculated, following the same calculation procedure as in the case of the financial rate of return (FIRR). However, the economic analysis goes beyond this mere adjustment of the FIRR. The economic analysis of projects covers the assessment of the sustainability of the project's impacts to ensure the adequate incentives for producers, adequate funds for project's operations, to ensure highest benefits from the project and those benefits can be distributed to the right targets of the project, and to ensure all the environmental and social (resettlement, indigenous people) impacts being included into the economic analysis.

3. SOCIAL IMPACT ASSESSMENT

Summarize key social issues relevant to the project objectives, and specify the project's social development outcomes. Describe the steps undertaken for social analysis and the results of the social analysis and how this analysis has influenced project design. The analysis should (a) determine the key social issues in relation to project objectives; (b) identify the key stakeholder groups in this context and determine how the relationships between stakeholder groups will affect or be affected by the project; (c) identify social development outcomes of the project and actions proposed to achieve those outcomes. If the project is a phased or sector investment operation, where the social impact may not be fully known at appraisal, describe how the social analysis will be completed or updated and coordinated with other project components.

Key social issues include differential access to project benefits, depending on stakeholder group affiliation; conflicting demands on the same resources, e.g., land, budgetary allocation; selection of target group; public perception; the risk of adverse social impacts related to the project.

Stakeholders are organizations of civil society, business and the public, social groups or individuals whose participation can positively or negatively affect projects. Social analysis identifies poor and vulnerable groups, groups whose cooperation is essential for project success, as well as groups to be affected by the project implementation. Stakeholder groups may be included or excluded based on employment activity, geographic location, gender, ethnicity, religious or political affiliation, etc.

Social development outcomes are the intended results that the project is expected to deliver: such as social inclusion, increased equity, strengthening of organizational capacity and social capital, promoting social cohesion, empowerment, accountable and transparent governance, and/or the mitigation of adverse impacts arising out of the project. For social impacts assessment the following questions should be answered:

- The key stakeholders of the project.

- How the key stakeholders participate in the project.

- Mechanisms for their continued involvement.

- Consultations or collaboration with NGOs or other civil society organizations.

- Possible resources to be earmarked for NGOs / CSOs as direct support costs, or for disbursement through NGOs / CSOs to primary beneficiaries.

- The social development outcomes.

- Institutional arrangements to ensure the project achieves its social development outcomes.

- Formal and informal organizations at the local, regional and national levels relevant to the project.

- Proposed institutional arrangements to ensure access for and serve the needs of primary beneficiaries.

- Alternative mechanisms for delivery of services or project benefits.

- Explicit indicators to monitor social impacts and social development outcomes.

- Resources to be earmarked for social development monitoring.

- Project strengthening impact of participatory monitoring.

- Information dissemination mechanism through which stakeholders receive social data and contribute to its analysis.

- The implementation arrangements flexible enough to respond to ongoing monitoring and evaluation finding.

- Provisions made by the project to ensure compliance with applicable safeguard policies.

- Mechanisms established to undertake necessary actions during implementation.

The social impacts assessment will show how the project is assessed in socio- economic terms and in socio-cultural terms. To know how the project is assessed in socio economic terms the followings should be identified:

- The most important effects of the project's main development benefit in the socio-economic field, its significance in the aspects of alleviating poverty, satisfying basic needs, and reaching large population segments.

- Comparison of project costs and the achievable benefits, and the project sustainability.

- The cost of the present approach in comparison with other possible alternatives for improving the target group's living conditions, e.g. income generation.

- If the project is primarily justified on economic grounds, address the income distribution and employment effects assessment.

- Negative social side effects (e.g. handicapping certain groups by crowding out competition, crowding out resulting from the project's site) to be expected, and the control of them within acceptable limits.

- The evaluation method of effects on women.

- The evaluation method of effects on ethnic minorities.

- The resettlement plan (RP) if the project involves resettlement.

- The budget for the land acquisition and resettlement to be included adequately in the project

budget.

- The list of the resettlement affected people included in the RP.

To know how the project is assessed in socio-cultural terms the followings should be defined:

- If the project requires changes of attitude and behaviour that are difficult to achieve in the short term or are even in conflict with the traditional value systems or hierarchies.

- If there are any risks regarding the participation/acceptance of/by the target group or by other important project participants that is indispensable for the sustainability of the project.

- If the project advances processes of social change.

4. ENVIRONMENTAL IMPACT ASSESSMENT

Summarize the project's environmental impact and explain how environmental and natural resource management issues associated with the operation have been resolved/mitigated. If an environmental assessment has been carried out, briefly discuss (a) the main findings of the environmental assessment, (b) the process of consultation with affected groups and NGOs regarding the environmental assessment and (c) feedback to key stakeholder groups on the findings of the assessment. If indigenous peoples' plans and/or resettlement plans have been formulated separately from the environmental assessment, briefly discuss (a) the main findings of each, (b) the consultation process, and (c) feedback to stakeholder groups.

If the project is required to carry out environmental impact assessment according to the Law on Environmental Projection, the following principles should be based on when doing EIA:

- Principle 1: Focus not solely on physical environmental impacts, but also on the effects that these impacts may have on productivity (such as crops, fisheries, non-timber forest products), health (such as diseases and mortality), recreation (such as tourism), biodiversity, and others.

- Principle 2: Examine all physical environmental impacts and all associated effects, on site and off site, and not only on those impacts observed on project location.

- Principle 3: Recognize that the environment has multiple use and therefore multiple values, which extends from productive values to existence values. Determine which of these values may be affected by the project, and proceed with the economic assessment of the environmental impacts.

Summarize the steps undertaken for environmental assessment and EMP preparation (including consultation and disclosure) and the significant issues and their treatment emerging from this analysis:

- Key environment issues include area of influence on natural environment (air, water and land), human health and safety, global environment, and social impacts.

- Describe relevant concerns that might make the project “at risk” in the future; also describe actions taken to mitigate these risks.

- If EA categorization reflects the significance of the issues and the magnitude of the proposed mitigation measures.

- The main features of the EMP and the coverage.

- If the recommendations of the EA are well supported and reflected in project design and implementation (including economic analysis and alternatives).

- If the environmental management plan (EMP) include financing arrangements for mitigation measures and supervision.

- The capacity of institutions to handle implementation of the EMP.

- The appropriateness of environmentally related conditionalities and covenants included in the loan/credit legal agreements (in the case of ODA project).

To assess the environmental impacts, it is necessary to consider if stakeholders have been consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed environment management plan. Describe:

- The mechanisms of consultation and groups which were consulted.

- Similar arrangements for consultation mechanism, implementation and monitoring/ evaluation.

- Consistency of mechanisms with the government's policies for consultation.

- Mechanism(s) that have been established to monitor and evaluate the impact of the project on the environment.

- The coherence of the indicators with the objectives and results of the EMP;

- The activities which will be funded for the promotion of environmental agendas and sustainability of these agendas in the country.

5. CRITICAL RISKS

Outline key project risks (project implementation delays, technical, financial, political, environmental, social, institutional problems, etc.) - those likely to have a substantial impact - and the likely impact on project outcomes if risks materialize. (a) rate each risk according to whether it is high, substantial, modest, or low; and (b) outline measures that will be undertaken as part of project design and implementation to alleviate these risks. Analyse the sensitivity against various adverse changes:

- Increase in capital costs.

- Increase in O&M costs.

- Reduction in revenues.

- Delays in sub-project revenues.

- Economic.

To analyse the sensitivity against various adverse changes, the report should mention:

- The main risks regarding the production and utilization of the project output in accordance with the objectives, based on lessons learnt from similar projects.

- The level these objectives may be influenced.

- Indicate manageable and non-manageable risks.

- Necessary measures planned to be carried to mitigate the risks.

- The main factors within the project and its environment putting the developmental effectiveness at risk.

- Based on the nature of risks, sensitivity variables should be considered. These sensitivity analyses will give the foundation of project viability.

- The probability that minimum requirements will not be met.

6. CONTROVERSIAL ASPECTS

Indicate the factors that might become controversial (e.g., in the media, with NGOs, or in local communities), indicating how to monitor and manage them. Potentially controversial issues may include the following:

- Social: projects involving particularly sensitive cultural or social issues: e.g., physical displacement; changes in access to resources; disruption to livelihoods; changes in social or economic standing; inequitable distribution of benefits and costs among stakeholders; exacerbation of regional/ income/ gender inequality; changes to patterns of behaviour that would not be consistent with prevailing gender perceptions, social norms, and religious or cultural values.

- Ecological: projects involving conversion or degradation of natural habitats or ecosystem functions either directly or potentially through induced development. These concerns have largely to do with natural habitats, biodiversity, extraction of natural resources, etc.

- Pollution: projects involving pollution hazards presenting risks to people or the environment or posing other threats to human health and ecosystem functions. Concerns may deal with air and water quality, treatment and disposal of hazardous materials and wastes, contamination of foodstuffs, etc.

- Governance: projects addressing, affected by, or having an impact on the role of the state, transparency, and accountability. Concerns may include issues affecting the political economy, fiscal balances/austerity measures, cost recovery, tax policy, judicial reform, privatizations, civil service reform, procurement/contracting processes, competing level of government (decentralization/delegation), regulatory reform, corruption, income inequity, special privileges, minority rights, access to information, etc.

- Management Capacity: projects for which the implementing agency/project sponsor has a low capacity or commitment to ensure appropriate handling of the issues.

7. PROJECT SUSTAINABILITY

Project sustainability is to be analysed to ensure that the impacts of the project can be sustained. To analyse the project sustainability the followings should be clearly stated:

- The sustainability of technology used in the project after the project completion.

- The financial sustainability to maintain project outputs after the project completion.

- The capacity for the project management and operation following its completion.

The above could be illustrated as a Risk Allocation Matrix as an example of a streamlined chart for infrastructure sector:

Risk Category	Sub-Category	Project Implementing	Contractor /	Government	Commercial Lender	ODA	ECA, MIGA	Commercial Insurance	Others	Potential Risk Mitigation Instrument
Technology		☐								
Construction	Delay		☐							Construction Contract
	Cost Overrun		☐							Construction Contract, Contingent Finance
Operating	Damage, Theft							☐		Standard Insurance
	Technical Performance		☐					☐		Supplier Performance Guarantee
	Management	☐								
Commercial	Operating Cost	☐								
	Price	☐		☐					☐	Long-term PPA; Guarantee by Government
	Demand	☐		☐					☐	Long-term PPA
	Payment	☐		☐						Escrow-Account
Financial	Total Debt Amount		☐		☐	☐				Project Finance, Syndication
	Loan	☐			☐					Instruments like mortgage etc., or Limited Recourse Project Financing like assignment of earnings
	Interest rate	☐			☐				☐	Interest rate SWAP
	Exchange rate			☐	☐	☐			☐	Exchange rate SWAP
	Maturity	☐			☐	☐				Financial Instrument, Conditional Loan
Force majeure							☐			

8. LOGFRAME

Logframe helps policy-makers more clearly to see the inputs, outputs, outcomes and impacts of the project and the risks which may happen. However, there are also shortages which can happen with logframe, as follows:

- Precise description of a project leads to inflexibility in project design.

- Precise description of a project depends on using objectively verifiable indicators. These are easier to collect from "official" sources of data than from the general population. Thus, project designers tend to focus on economic indicators rather then people's experiences, and they tend to ignore qualitative data in favour of quantitative data. This may distort project design.

- The project framework system is neutral because it does not encourage project designers to take into account the points of view of all stakeholders. Again, this may distort project design by allowing project designers to ignore the views of some stakeholders.

- Project designers tend to complete the logical framework as the final step in project appraisal (after the project has been designed).

- Some project designers treat assumptions too superficially. As a result, they do not develop contingency plans for dealing with problems that arise during the project implementation.

- The Goals and Purpose categories may be filled with too much detail.

To solve these problems there may be some solutions:

- Encourage project designers to enter the "inputs" from various stakeholders as "Assumptions" to highlight the fact that project success depends on participation from all stakeholders.

- Design projects to be process oriented rather than as a blueprint. This will involve setting times for periodic reviews of the project within the project plan. It will also involve constructing a series of project frameworks to reflect the new circumstances that unfold during the life of a project

The logframe should be prepared in accordance with the following format and summarize the final design of the project, usually comprises 16 frames organized under 4 major headings, as presented in the table below.

- The **Design Summary** provides information on the basic building blocks of the project and presents them as a cause-effect chain drawn from a preceding cause-effect analysis. The inputs are expected to result in the outputs, which in turn are expected to achieve the immediate objective (sometimes called the purpose) of the project which contributes to the longer term objectives (sometimes called the goals of the project.). Some logical frameworks include the category of Activities. This refers to the detailed and chronological tasks, which will use inputs and deliver outputs.

- The **Verifiable Performance Indicators** tie down performance requirements for each element of the project design. These are specific tangible and/or quantifiable measures of achievement for each level in the design summary. These indicators are important in both monitoring and assessing success.

- The **Monitoring Mechanisms** are the sources and/or methods, which will be used to collect data for monitoring performance at each level of the cause.

- The **Assumptions and Risks** identify other conditions, which are external to the project but are needed to ensure that one level indeed causes the next level of performance to happen. Thus, given the level of inputs, outputs will be produced *assuming* project staff has the required technical skills *(assumptions)* - and outputs will give us the expected impacts - *assuming* no major natural disaster takes place *(risks)*.

Project design summary	Verifiable performance indicators	Monitoring mechanism	Assumptions and risks
Goal: (Provide a one-sentence statement of the long-term strategic goal to which the project is designed to contribute).	These indicators are as the part of the good practice sector management	This column identifies where the information for verifying each indicator will be found, and the process involved.	These assumptions often involve conditions, actions, or responses outside of the project and outside of the sector.
Purposes: (State here the long-term development objective of the program) Provide a one-sentence statement of the behavioural change expected from the target beneficiary-group or institution(s) by the end of project implementation.	State here the indicators which are expected to be achieved upon completion of the program as a whole.	Indicators accompanying the program purpose are monitored and documented in project reports, supervision mission reports, and evaluation	Assuming that the program purpose is achieved in the long term, list any additional assumptions needed to logically link it to achievement of the goal; Where data collection is required, specific mention should be made of methods and responsibilities, which may include inquiries from beneficiaries.

Outputs State here (in the past tense) the value added by the completion of each component) Each output should correspond in number to its respective component.	Output indicators have quantity, quality, and time attributes. If time is not stated, the end of project is assumed. Output indicators generally include measures of cost-efficiency.	Output indicators are generally monitored and/or evaluated via various project reports: supervision mission reports, and evaluation (midterm and final) reports. Sources of data for M&E these indicators typically include administrative and management record keeping systems and summary reports.	Assuming that the outputs are achieved by the end of the project, list any additional assumptions conditions, policy changes, or expected behaviours of beneficiary groups or institutions) needed to achieve the project objective.
Inputs/Activities - A component is a cluster of sub-components and activities that are designed to produce a single project output.	- List component inputs in terms of the total cost of each component including contingencies (e.g., US$___)	- Inputs are monitored via progress and disbursement reports (both quarterly). - Inputs are evaluated via supervision mission (semi-annual) and audit reports (annual).	Assuming that the components and activities are implemented successfully, list any additional assumptions needed to achieve the stated outputs.