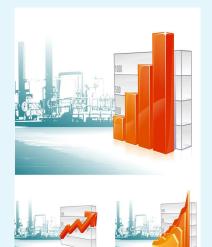


# MINISTRY OF PUBLIC INFRASTRUCTURE, LAND TRANSPORT & SHIPPING

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# INVESTMENT

PROJECT

PROCESS

MANUAL

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December 2008

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# **INTRODUCTION**

This Investment Project Process Manual (IPPM) is being issued in accordance with section 22A of the Finance and the Audit Act as amended by the Finance and Audit (Amendment) Act 2008. It is aimed at:-

- organising the Investment Project Process
- developing a single window system for project approval
- establishing best practices in investment budget expenditure in respect of investment projects based on Programme Based Budget (PBB) principles
- developing a well defined long-term pipeline of projects
- ensuring active user participation in the project process leading to a timely completion of projects within the approved budget.

Every Public Officer shall, in the performance of his duties, comply with the instructions specified in the IPPM.

# **1.0 INVESTMENT PROJECTS**

#### 1.1 WHAT IS AN INVESTMENT PROJECT

An investment project involves the procurement of:-

- new infrastructure/facilities
- significant long-term renewal
- improvements to existing infrastructure/facilities
- a combination of any or all of the above

Typical investment projects include construction of new buildings, hospitals, roads, power plants, water reservoirs and other infrastructure items; replacement of old facilities; renovation of existing facilities; acquisition of new facilities; or purchase of equipment. Investment projects normally are large, non-recurring expenditures which involve multi-year funding, have a useful life greater than five years, are based on a comprehensive needs assessment, meet an essential public purpose, and require public accountability for funds.

An investment project always has direct implications for future operating budgets. The recurring costs of investment projects on completion will have to be clearly understood and estimated by Public Bodies before embarking on the decision to go ahead with the projects.

Investment projects may be funded from Government-owned resources, grants or loans from foreign institutions and/or by the private sector.

The need for all investment projects may be an outcome of a programme under PBB involving either the acquisition of new facilities or the preservation of existing facilities.

**1.1.1 <u>Projects for new facilities</u>** primarily achieve programme requirements by creating a new facility or asset through construction or purchase.

**1.1.2** <u>Projects for preservation</u> are aimed at preserving and extending the useful life of existing facilities and assets and do not significantly change the programme use of the facility or asset. Examples include renovation of buildings, upgrading utility systems, repairing streets, roads, parking lots, etc.

Projects proposed to preserve existing assets are reviewed and compared on a technical basis so that the most urgently needed work is financed first. For instance it may become necessary to install or renovate air-conditioning system in a centrally air-conditioned building before replacing the furniture.

Preservation projects reduce maintenance costs in future. However, continual deferral of annual maintenance result in a significant increase in the restoration costs.

#### 1.2 INVESTMENT PROJECT CATEGORIES

Investment projects may be classified under the four categories, namely, acquisition, new construction, improvements, and equipment within the classification of new facilities or preservation projects as explained.

**1.2.1** <u>Acquisition:</u> Acquisition includes purchase of land, including improvement works on the acquired land like demolition of buildings or leveling etc. All acquisitions of real property are subject to the investment project proposal process. This may include capital leases.

**1.2.2** <u>New Construction:</u> A new construction project is a single undertaking involving construction of one or more facilities. Included in the project are: all work necessary to accomplish a specific purpose and produce a complete and usable new structure; the associated technical/professional services; the equipment installed and made part of the facility and site development and improvements. New construction includes:

- any site work, the erection, installation, or assembly of a new building, structure, or utility system.
- any addition, expansion, or extension to a structure that adds to its overall exterior dimensions.

• complete replacement of a facility that, because of age, hazardous conditions, obsolescence, structural and building safety conditions or other causes, is beyond the point where it may be economically repaired or renovated and can no longer be used for its designated purpose.

**1.2.3** <u>Improvements:</u> An improvement is defined as all works necessary to produce a complete and usable change to an existing facility or structure, including the associated professional and other technical services, the fixed equipment installed and made part of the facility or structure, and site development.

Improvements include:

- alteration of interior space and other physical characteristics, such as utilities, so that the structure may be more effectively used for its present designated functional purpose.
- conversion of interior arrangements and other physical characteristics, such as utilities and fixed equipment installed on and made a part of the facility or structure, so that an existing structure may be effectively utilised for a new functional purpose.
- renovation of most or all of a facility or structure or an existing mechanical system to comply with current building code requirements or to modernise it so that it may be more effectively used for its designated functional purpose.

- restoration of a facility or structure, to the maximum extent possible, to its former or original state.
- relocation from one site to another of a facility or structure either by moving it intact or by disassembling it and subsequently reassembling it.
- major repair to restore a facility, mechanical system, or utility system to a condition that allows it to continue to be appropriately used, including the reprocessing or replacement of parts or materials that have deteriorated by action of the elements or "wear and tear" in use.

**1.2.4** <u>Equipment:</u> Equipment is a tangible resource of a permanent or long-term nature used in an operation or activity and is an integral part of a facility. All equipment needs which are associated with projects defined as new construction or improvements, are to be included in the PBB for these projects. Replacement equipment which is an integral part of an asset must be requested in the investment budget.

Given the short useful life of repairs or maintenance work, expenditures for ordinary or normal maintenance are not included in the PBB. Ordinary or normal maintenance are small, temporary, or routine repairs necessary to keep an existing facility or asset in good condition for functionality and comfort. These works maintain or preserve the usefulness of the asset rather than changing or significantly improving it.

#### 1.3 INVESTMENT PROJECTS PLANNING

Because of their complexity and the long lead time needed to review projects, investment budget process needs to be started much ahead in the annual budget cycle. Based on the sector strategies and Government priorities, the pipeline of appraised projects will be developed. The Macroeconomic Framework will provide the basis for determining the overall resource envelope available for the following time frames:

- Short Term Less than 3 Years
- Medium Term 3 to 5 Years
- Long Term 6 to 10 Years and above

#### 1.3.1 Long Term Investment Projects Plan (LTIPP)

A successful investment programme will start with coordinated long range planning which is based on the national strategies and an assessment of the country's resources and needs. The Government will take into consideration its national strategies and its natural resources, geography, access to markets, transportation systems, industries, educational opportunities, public safety, and basic infrastructure items such as water distribution, wastewater treatment, sanitation facilities, electrical infrastructure, healthcare, public facilities, cultural facilities, etc., to develop its national strategies. Based on an assessment of these resources and their condition, the Public Bodies can develop a prioritised, long range list of investment needs or a long term pipeline of projects. A needs list can more readily be developed with investment project prioritisations reflecting national strategies. Initially, projects in the long range plan will only need a brief title, description, location, and estimated cost. In subsequent iterations of the investment process, more details will be needed and the estimates will be refined.

A long range approach to planning investment projects is a necessary requirement of a sound financial management system. With a grounded investment plan, Government will be able to assess future financing requirements, assess the impact of investment projects in meeting the goals, and provide a basis for rationally allocating scarce resources.

Long range planning will aim to identify future issues and how the investment projects will address those issues. Long range plans must support the spending organisation's mission and the goals and objectives of its strategic plan. Each project proposal is to address the project's link to Government expectations and what activities are supported.

Project proposals will have to be presented by Public Bodies to the Project Plan Committee (PPC) as per the Project Request Form (PRF) at Annexure I. A project will be included in the LTIPP after assessment and recommendation by the PPC and approval of Cabinet.

The LTIPP would be reviewed and formulated every year.

#### 1.3.2 Medium Term Investment Projects Plan (MTIPP)

The Government will propose a MTIPP based on proposals and policy considerations of all Public Bodies.

Mid-range planning will generally occur between three to five years before expected project approval and funding. The final product of the mid-range review is a MTIPP which is a recommended list of prioritised projects for the next three to five years. The priority projects in the MTIPP will normally be the projects recommended in the next budget.

During the mid-range planning, the projects listed in the plan may differ from the long range plan because circumstances or priorities may change, new projects have been identified, or projects deleted, deferred or combined. Essentially, the mid-range planning is a continuation of the long range planning. As a project's standing on the priority list improves, greater project detail will be needed and requested. In case the feasibility study has not been carried out for projects, it shall be carried out at this stage before starting with the actual execution.

The three to five years' planning process recognises that major investment projects may span over several years from start to finish. In many cases, capital budget decisions precede the implementation of new or expanded programmes with facility requirements by several years. Because of this, it is essential that decision makers be able to determine how present PBB decision will affect programmes and operating costs in the future. The project request proposals shall cover the following as per the PRF:-

- explain what policy initiatives may be expected in the next three to five years.
- direct linkages to the priorities set by the Government.
- links to the Public Body's strategic plan and how the project relates to the plan's strategies, activities, and performance measures.
- describe why this project is the preferred alternative and how the project will address documented needs.
- describe the alternatives considered and the consequences of deferring the project.
- demonstrate consistency with the Public Bodies operating budget.
- include up-dated information on each project with any changes from the previous investment plan.

During the mid-range planning, the requestors are to focus on the potential project, its scope to ensure that the project will be manageable with realistic goals, and resources can reasonably be expected to be available. The investment submissions shall include the project title, a unique identification number that can be used to track the life of the project through the budget based on chart of accounts systems, scope, description and justification of the need for the project, estimated cost, and recommended source of funding. The submission is to be in priority sequence by year.

With this information projects can be evaluated by the PPC technical team and those highest priority projects that best meet national objectives and which have the best potential for inclusion in the next PBB will be selected.

The results of the mid-range review will be published in a MTIPP which have executive level/ Government approval. The MTIPP is the country's five-year prioritised investment plan and is a public document.

The MTIPP is the defining document for decisions on what projects to be included in the annual budget. Budget organisations shall be responsible for documenting and justifying the proposed plans, sources of funding, and operating budget impacts in this document.

The primary objective of the MTIPP is to identify and execute up to completion those investment projects that will best meet national objectives in the most cost efficient manner. Open communications throughout the investment planning, budgeting, and project execution process are essential to ensure that these projects are identified and completed in an efficient and timely manner.

The MTIPP will be reviewed and formulated annually by the PPC.

#### 1.3.3 Short Term Investment Projects Plan (STIPP)

After the initial mid-range review, the projects that were approved by the PPC are organised by the Public Body in a priority list based on their sector strategies and programmes within the allocated ceiling. Assigning all projects as the highest priority will result in the Public Body's package being removed from consideration until a rational approach is reflected in the request.

The detailed PRF as per Annexure I for all projects as approved by the PPC are also required to be submitted and shall include additional scope and costing information so that the Ministry of Finance and Economic Empowerment (MOFEE) can evaluate the priority of proposals in detail.

The scope information (number of square meters, capacity of plant, number of beds, etc) will be evaluated to determine whether the country's basic life safety and building codes can be met and that there are no other conflicting projects.

Likewise, the additional financial information (how the cost was derived for each project phase-design, construction, testing, furnishings and equipment, utilities, project inspection, etc) permits an evaluation as to the reasonableness of the cost estimates. The detailed submission is to also include the estimated project implementation plan. Finally, the detailed project submission is to address and estimate the impact on the operating budget.

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The projects after detailed reviews by the Public Body and the MOFEE in the estimates committee are recommended to be included in the budget.

# 2.0 THE PROJECT PLAN COMMITTEE AND THE PUBLIC SECTOR INVESTMENT PROGRAMME UNIT

#### 2.1 PROJECT PLAN COMMITTEE (PPC)

The PPC is set up in the Ministry of Public Infrastructure, Land Transport and Shipping. The Permanent Secretary of the Ministry of Public Infrastructure, Land Transport and Shipping (Public Infrastructure Division) or his representative shall be the Chairperson of the Committee.

The Committee shall consist of representative(s) of the following Ministries:

- Ministry of Public Infrastructure, Land Transport and Shipping (Public Infrastructure Division) – MPILTS
- Ministry of Finance and Economic Empowerment MOFEE
- Ministry of Renewable Energy & Public Utilities MREPU
- Ministry of Housing and Lands MOHL
- Ministry of Local Government –MLG

The PPC may co-opt representatives from other Public Bodies to assist the Committee in discharging its functions.

The functions of the PPC are as follows:

• assess whether project proposals meet the infrastructure needs of the country.

- examine feasibility and cost benefits of infrastructure project proposals.
- make recommendations on investment projects for inclusion in the project pipeline.
- examine and review specifications.
- advise Public Bodies on the appointment of Project Managers.
- give clearances on projects whose pre-tender cost estimates exceed the approved cost estimates.
- review the progress of investment projects above Rs100M or any priority project as instructed.

The PPC may also defer a request for future consideration or deny a request and propose possible alternative, if any.

Each Public Body will develop an investment plan comprising a list of projects that would support the delivery of the output necessary to achieve the goals and objectives in the strategic plan. This list of projects is an outcome of policies, programme and sectoral needs of the Government.

All investment infrastructure project proposals above Rs25M will be reviewed by the PPC, in consultation with implementing agencies and other concerned Public Bodies prior to the development of a pipeline of projects. An Investment Project Proposal estimated at below Rs25M does not require the approval of the PPC but shall be submitted to the MOFEE for approval as per the format at Annexure I. If during the pre-bid phase, the project estimate increases beyond Rs25M, the project shall be considered in the next investment budgeting cycle, or if there is urgency, it shall require the concurrence of the PPC and the Public Sector Investment Programme Unit for consideration as an amendment to the investment budget.

#### 2.2 <u>PUBLIC SECTOR INVESTMENT PROGRAMME (PSIP) UNIT</u>

The PSIP Unit is a unit set up in the MOFEE. The PPC will submit the approved pipeline of projects to the PSIP Unit which is responsible for the preparation of the PSIP.

The PSIP Unit consists of all projects with particulars for implementation in the next 10 years prioritised in line with national sector strategies, programmes and Macro Economic framework.

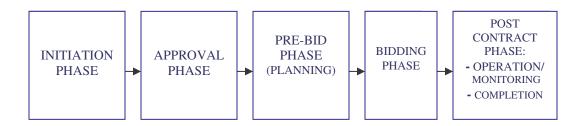
The PSIP document is a coherent plan for public sector investment that aligns Government economic vision with sector policies, corresponding infrastructure needs and the required funding arrangements. It is a useful guide to policymakers, development partners, line ministries/public enterprises and the private partners for informed decisions on those investment projects that can be funded partly or wholly through public funds, foreign loans/grants and private capital. Investment Projects to be included in the PSIP are prioritised based on state of preparedness, affordability, and financing secured in the form of foreign loan, grant facility, etc. Public Bodies have to prepare a project brief for each investment project to be included in the PSIP document.

The project brief shall include, inter alia, the following:

- Project Title
- Project Rationale
- Project Description & Objectives
- Estimated Cost by component
- Project Status
- Financing Options
- Proposed Disbursement Schedule over the Medium Term

# 3.0 PROJECT PHASES

Any investment project passes through a number of distinct phases, the nature of which usually varies according to the type of project and the time required for each phase. A summary of the processes is shown in the diagram below:



**Note:** The guidelines at the Pre-Bid and Post Contract Phases are not exhaustive and do not cater for all types of situations and circumstances which would require some adaptation.

#### 3.1 PROJECT INITIATION AND USERS' REQUIREMENTS PHASE

This phase is the most important one and has to be carried out effectively for the project to succeed.

The PSIP Unit will every year in a specific month issue a circular to all Public Bodies inviting them to submit proposals to the PPC for projects to be included in the project pipeline. All proposals will be subject to a deadline for submission.

When developing project proposals for submission to the PPC, Public Bodies shall ask the following key questions:

- Is the project a critical one and the only input to achieve the required outcomes under the sector strategies and programmes?
- Is the Government the only agency to provide the facility and invest resources?
- Are we purchasing/creating the assets at the best possible price?
- Is the design, scope of works and specifications value for money?

It is the responsibility of every Public Body to:-

 (i) identify the infrastructure needs as per its sector, for example, through research activities, funding opportunities, overall planning process, etc;

- (ii) carry out feasibility and cost benefit analyses for infrastructure project proposals; and
- (iii) make proposal for inclusion in the investment project pipeline.

The Public Body when defining the scope of works, the objectives and the costs may seek the advice of other Public Bodies having experience in such type of investment projects.

# 3.1.1 Preliminary and Feasibility Study

A preliminary study is required for all projects above Rs25M. For projects above Rs100M or projects high on priority (particularly time sensitive, high risk, or that incorporating state-of-the-art technology), Public Bodies are required to conduct a feasibility study.

Key to the success of any investment project is a clear, accurate, and specific understanding of the facility need/problem to be addressed and a thoughtful analysis of the options to meet the need or solve the problem.

Based on the preliminary study the Public Bodies answer a specific set of questions designed in the Format for PRF at Annexure I to ensure full understanding of the project requirements based on sector strategies and programmes, alternatives available, defining the scope of works, location and availability of site and other infrastructure, funding options, budget & implementation schedule, project implementation and management, etc.

Completion of the preliminary or feasibility study is an important step in acquiring funding for the design and construction of the proposed solution. After the preliminary or feasibility study has been finalised and approved by the Public Body it will be referred back to the PPC for inclusion in the project pipeline.

### 3.1.2 Benefits

A preliminary study or feasibility study provides a number of benefits:

- long-term planning with complete information on requirements helps Public Bodies make more specific decisions leading to less changes and avoidance of wastage.
- an opportunity to uncover alternatives that had not been previously considered.
- internal programme planning and cost or schedule issues not previously known can be explored before large sums of money are invested.
- risk can be identified and minimised through a more rigorous process.
- an opportunity is afforded to review total project budgets prior to the design phase.
- better planning also offers a potential for cost savings.

#### 3.1.3 Audience

The Feasibility Study Report or the Project Request Report document will be useful to various other audiences, such as Donors/Funding Agencies, the project design team, Public Bodies project staff and management, National Assembly, MOFEE and the private sector for Public Private Partnerships options.

### 3.1.4 Feasibility Study Report

The standard requirements for a feasibility are stated in detail at Annexure III.

#### 3.1.5 Feasibility Study Funding

Appropriations shall be obtained through the budget process prior to proceeding with a feasibility or pre-feasibility study. The need for a pre-feasibility study is based on the complexity and the cost of the project.

#### 3.1.6 Impacts on Operating Budgets

Investment projects have an impact on future operating budgets. Projects with a large cost impact on the operating budget in future years shall receive additional scrutiny to determine if the impacts can be accommodated.

Public Bodies shall include in the project document an estimate of the project's impact on operating budgets such as staff cost, repairs and maintenance, and other running expenses as well as revenue streams and debt servicing. They have to identify potential savings in operating costs and efficiency gains due to the proposed infrastructure proposal. A comparative cost assessment shall be submitted.

Public Bodies shall also make proposals on how any additional operational costs can be met and provide full description of the revenue raising instrument (user fee, charges, etc)

#### 3.1.7 How to Prioritise Projects?

In prioritising projects, due consideration are to be given to:-

- emergencies or requests associated with legal or judicial mandates or related to change in international laws or as a result of natural disaster
- requests for infrastructure-related projects (boilers, steam lines, water distribution systems, etc), fire code or life safety code projects, or projects to abate hazardous conditions that are necessary for the continued use of the facility or the service
- requests to supplement construction funding for projects for which funds are already appropriated and are in construction phase (ongoing projects)

- requests for construction funding for projects for which "design phase money" has been provided and has to start with construction phase after assessing that the project still serves the sector programme objectives
- requests to replace or add to existing facilities which are extremely essential and unavoidable for the operation of existing assets. This may also include the requests to improve or modify the use of existing facilities
- requests to construct or acquire new facilities based on sector programme objectives

### 3.1.8 Exploring Funding Options

Once the project need is established, the funding options for the investment shall be considered in the following sequence:

#### (a) Private Sector

Public Bodies must first determine whether this need can be fully met by the market and private operators.

#### (b) Public Private Partnerships (PPP)

Public Bodies must fully explore the possibilities of executing projects or delivering public services through one or more of the financing modes provided for under the PPP legislation, including the PPP Guidance Manual. The Manual can be accessed at the website of MOFEE (http://mof.gov.mu). The PPP Unit will provide guidance to Implementing Agencies.

## (c) External Financing

#### (i) Grant

Possibilities for project grant from external development partners may be explored by the Public Bodies with the assistance of MOFEE.

#### (ii) Loans

Likewise MOFEE will assist in exploring possibilities for concessionary loan financing from foreign funding agencies combined with Technical Assistance.

### (d) Domestic Loan Finance

Parastatal Bodies and Local Authorities shall explore possibilities for raising project financing from the market on a non-recourse basis prior to seeking Government support for funds/guarantees.

### (e) Government-owned resources

Funding from Government-owned resources through the Budget shall be resorted to only when all other options have been explored and exhausted.

## 3.2 <u>APPROVAL PHASE</u>

Public Bodies shall submit Investment Proposals for projects estimated at above Rs25M as per PRF at Annexure I including:-

- 1. Approval required for;
- 2. General project information;
- 3. Project brief;
- 4. Site information;
- 5. Costing information;
- 6. Financing information; and
- 7. Project time schedule.

# A Project Request Form (PRF) Filling Instructions is at Annexure II.

# **Evaluation of Projects**

Projects submitted as per PRF are evaluated on the basis of the following evaluation criteria:

	Question	Marks
1.	Are the project objectives, needs/requirements and scope of	
	works clearly defined/stated?	
2.	Are the project needs/requirements justified as per the	
	strategies, programmes and objectives of the department?	
3.	Is the project crucial and the only input to achieve the	
	required outcomes under the sector strategies and	
	programmes?	

Question		Marks
4.	Is it not possible to achieve the desired requirements in the	
	existing infrastructure?	
5.	Whether other alternative have been explored for the	
	project and is this the most cost effective alternative for the	
	project?	
6.	Is the project feasible as per the technical feasibility report?	
	(Mandatory for projects above Rs.100 million)	
7.	Is the land for infrastructure development available with	
	clear ownership and without any encroachment or other site	
	deficiencies?	
8.	Whether Costing Information with detailed cost	
	components, Impact on recurrent/operating budget,	
	Implementation and Expenditure Schedule been submitted?	
9.	Whether all the Funding sources / options like PPP, Donors	
	have been explored?	
10.	Is the Government the only agency to provide the facility	
	and invest resources?	
11.	Are we purchasing/creating the assets at the best possible	
	unit price?	
12.	Is the design, scope of works and specifications value for	
	money?	
13.	Is there a project Implementation Approach stated for	
	efficient project delivery or information given on project	
	management process proposed to be used?	

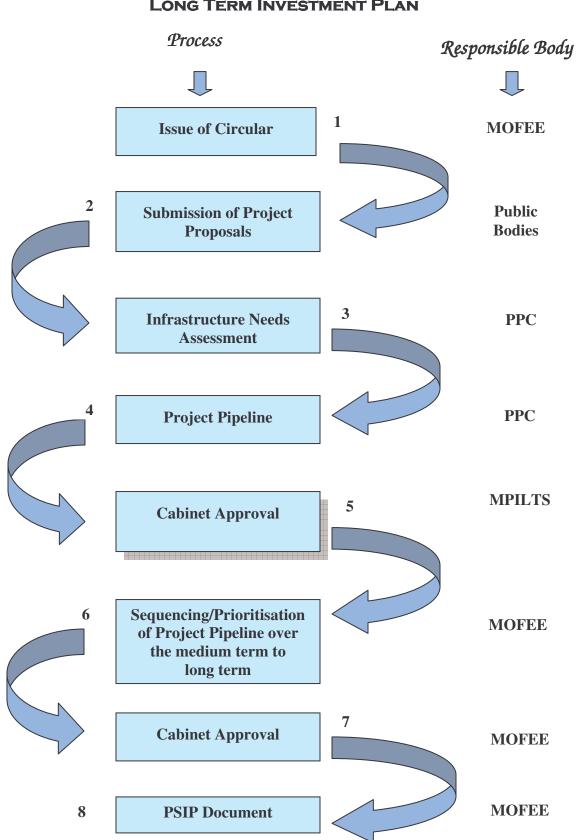
Question		Marks
14.	Are there risks like effective demand, delay in completion	
	or non responsive contracts, operative or maintenance risks	
	or technological risks associated with the projects?	
	(Here marks to 'Yes' and marks to 'No' as answers)	

# <u>Total: 100</u>

The PPC will decide on the markings and the minimum passmark for a project to qualify for inclusion in the project pipeline and for budget support. Once a project passes the evaluation test, budget support will be extended provided funds are available within the allocated Medium Term Budget ceiling of the Public Body.

After a project is qualified for inclusion in the project pipeline, the PPC will send its recommendation to the Minister to whom responsibility of Public Infrastructure is assigned for seeking the approval of Cabinet. Upon receipt of Cabinet's approval, the Supervising Officer of the Ministry responsible for Public Infrastructure will forward the approval to the PSIP Unit for sequencing/prioritisation of project pipeline over the medium term to the long term.

Projects already qualified for budget support and required to be included in the coming budget will be reviewed by the Public Body and the MOFEE.



# ORGANISING SYSTEM AND PROCESS FOR DEVELOPING LONG TERM INVESTMENT PLAN

#### 3.3 <u>PRE-BID PHASES</u>

Implementation of investment projects take long time periods, involve complex management and there can often be time overrun and cost overrun. Therefore, these should be regularly and closely monitored, problems identified and prompt corrective actions taken. Prior to the start of the implementation of the project, all administrative issues will have to be confirmed and completed.

#### 3.3.1 Project Management Team

The Public Body will set up a project management team from amongst its inhouse professionals or from professionals recruited on contract. The Public Body will designate or in consultation with other Public Bodies concerned with such type of Investment project, designate an officer with relevant technical competency as the Project Manager in charge. Alternatively a Public Body may appoint private Consultants to implement the project and again in consultation with other Public Bodies as explained above designate a Project Manager in charge. However, a resident Project Manager may be appointed on contract basis with signing authority for the project and responsibility for the management of all the processes from inception to completion, all as per the terms of reference provided by the PPC. The Project Manager shall be appointed prior to the appointment of the other Consultants.

#### 3.3.2 Project Programme

The Project Manager shall produce a detailed project programme to be used as a guide during the pre-bid and post contract stages. The programme shall be based on comprehensive discussion and significant consultation between the Supervising Officer of the Public Body and the project management team. The programme shall address areas such as design aspects affecting value, for a building project for example, these will include building location on site, building size, shape, height, groupings, specifications and buildability, circulation areas, access, services and all other needs of the project that will form the basis for the design. The programme shall also include the implementation schedule with target dates for closer monitoring.

#### 3.3.3 Project Design

The information contained in the project programme will be used by the designers to produce outline proposals. Alternative designs will be considered and assessed. Where applicable the accepted design will be forwarded to relevant authorities for clearances, for example for building projects clearances will be sought from the Fire Services Department, the Wastewater Management Authority, the Ministry of Health and Quality of Life, etc, prior to seeking the approval of the Building Plans Committee. Once approved, the design will be developed by the design team. Plans, detailed specification, model or prototype, etc, will be produced for use in the next phase.

Throughout this phase cost planning and cost control techniques will be applied to ensure that the budget is not exceeded. The design team shall ensure that all designs, details, specifications, production information, etc, are complete and integrated to avoid variations during operation stage. The projects in which the pre-tender cost-estimate exceeds the approved cost estimate by 15% shall be referred to the PPC for clearance. Pre-tender cost estimates exceeding the approved cost estimates by less than 15% shall obtain the clearance of MOFEE.

#### 3.4 **BIDDING AND AWARD PHASES**

Once the bidding documents (prepared in accordance with standard bidding documents issued by the Procurement Policy Office) are ready, these are transmitted to the Central Procurement Board for vetting, approval and launching of bids. Upon the recommendation of the Central Procurement Board and in accordance with the provisions of the Public Procurement Act 2006, the Public Body will award the contract.

On appointing the Contractor, Public Bodies shall:-

- ensure that all documents (example: performance-bonds, insurances, etc) are obtained within the time prescribed in the documents.
- complete the contract documents for execution.
- issue a copy of the contract documents (or as otherwise specified in the documents) to the Contractor.
- keep the original contract documents in safe custody.
- follow strictly the provisions of the contract.

#### 3.5 **POST CONTRACT PHASES**

#### 3.5.1 Operation

The Project Manager and his team shall monitor and supervise the construction to ensure that the works are carried out in compliance with the contract documents. Contract procedures must be very carefully and precisely followed and any problem dealt with promptly. As a matter of principle, project steering committees shall be set up chaired by supervising officers to follow up the timely completion of projects.

A quarterly report on the project status and all investment expenditure shall be submitted to the MOFEE by Public Bodies as part of budget monitoring.

Variation in the project cost above that prescribed in the contract documents shall require the clearance of the MOFEE.

#### 3.5.2 Practical Completion

Once practical completion has been achieved, commissioning and thorough handover inspections in conjunction with the client and consultants will be carried out. The certificate of practical completion shall be issued only after all the deliverables as per the contract are completed and the project is operational. All as made drawings and maintenance manual shall be provided and explained to the Public Body by the Project Manager.

#### 3.5.3 Defects Liability Period

The Project Manager shall list all defects and notify the Contractor for rectification. Before any final certificate is issued, the Project Manager shall ensure that all defects are rectified. In case the defects are not rectified within a reasonable time or as stated in the contract, the mechanism of the contract shall be applied.

### 4.0 MAINTENANCE OF ASSET

All physical assets owned by the Government shall be recorded in the online Asset Register hosted on the Government Online Centre. A Physical Asset Management Unit (PAMU) shall be set up in the Ministry of Public Infrastructure, Land Transport & Shipping. The PAMU shall be responsible for developing and implementing a medium term Government Asset Maintenance Programme based on the Asset Register of the Government buildings. A priority list of projects requiring maintenance is to be developed.

Each Public Body shall set up a Physical Asset Management Cell from the existing staff to work closely with PAMU to ensure timely maintenance and upkeep of all assets under its use as per the guidelines developed by the Management Audit Bureau.

All Government-owned buildings after three years of completion shall be eligible for maintenance allowance as determined by the PPC to be included in the budget.

### Annexure I

# PROJECT REQUEST FORM

# **Investment Projects**

(Please Refer Attached Instructions for Filling)

## **APPROVAL REQUIRED FOR** :(*Tick the Relevant Box*)

А.	<b>Budget Support for Project Implementation</b>	
В.	Funding for Feasibility Study	
C.	Approval of Variation in Project Estimated Cost	
D.	Others	
1.0	<b>GENERAL PROJECT INFORMATION:</b>	
1.1	Ministry/Department/Organisation:	
1.2	Programme:	
	Activity:	
	Specific Objective:	
	Outputs:	
	Key Performance Indicators:	

1.3	Project Title:
	Actual/Proposed COA No.:
2.0	PROJECT BRIEF:
2.1	Preliminary/Feasibility Study Report Attached: Yes No
	(Feasibility Study Report essential for Projects above Rs100 million or of Specialised Nature)
2.2	Project Economic / Social Need Justification by Programme:
2.3	Project Requirements:
2.4	Floor Space / Area Requirements: in Square Meters (Sq.m.) or Square feet (Sq.ft.)
2.5	Other Alternatives Considered: Yes No
	(Attach Details of their costs and reasons leading to the choice)

2.6	Similar Existing Facilities:       Sufficient       Not Sufficient         (Attach Supporting Details)       Image: Sufficient Support
2.7	Priority number of this Project in the annual projects list of the spending Ministry/Department (1, 2, 3, 4, 5, 6, etc.)
2.8	Consequences of deferring the project
2.9	Basic Plans and Specifications Attached     (Essential for budget approval)   Yes No
3.0	SITE INFORMATION:
3.1	Has the required land been identified? Yes No
3.2	Has Environment Impact Assessment been carried out? Yes No
3.3	Are all services ( <i>roads, electricity, water, etc</i> ) available? Yes No
3.4	Is the Land Ownership Clear Yes No
3.5	Is Parking Space Available Yes No
3.6	Site Features:   Flat   Hilly   Marshy   Others
3.7	Any Other Site Information:

## 4.0 COSTING INFORMATION:

4.1 Estimated Project Cost (Rs. M) including VAT:

4.2 Unit Cost: (Rs./Sq.m) or as applicable:

### 4.3 \*Estimated Cost Components and Expenditure Schedule (Rs. M):

		Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	Site Acquisition						
	Land Cost						
	Demolition						
2	Consultancy Services						
3	Construction cost						
4	Mach./Equip						
	Furniture & Furnishing						
	IT & Computer peripherals						
	Telephone and fax						
5	Project Manager/ Allowances						
6	Others						
	TOTAL						

\* Detail Break up may be attached

## 4.4 Exclusions, if any:

For example: furniture, generators, computers, or others

## 4.5 Estimated Impacts on Recurrent / Operating Budget

## A. Staffing Plan:

	Managerial	Technical	Support	Total
Existing Staff				
New Staff after project				
implementation				
TOTAL				

# B. Ensuing Operating/Recurrent Expenditure (after completion) (Rs. M):

	Year 1	Year 2	Year 3	Year 4	Year 5
Wages & Salaries					
Compensation					
Maintenance					
Other					
TOTAL					

## C. Estimated Savings due to this project:

	Year 1	Year 2	Year 3	Year 4	Year 5
Rent					
Traveling Cost					
Maintenance					
Others					
TOTAL					

### D. Revenue Generated from the Project:

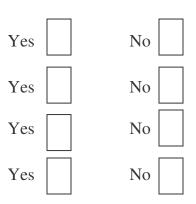
	Year 1	Year 2	Year 3	Year 4	Year 5
Rent					
Fees					
Tolls					
Others					
TOTAL					

## 4.6 Any Other Costing Information: .....

### 5.0 **FINANCING INFORMATION:**

#### 5.1 Financing Options Explored:

- A. Public Private Partnership (PPP)
- B. Grant from Donors
- C. Loans
- D. Government Budget (GOM)



5.2 Reasons for Financing Option/s Selected:

## **5.3** Proposed Financing Proportions / Percentages and Schedule:

	Percentage of Total Cost	Amount	Year 1	Year 2	Year 3	Year 4	Year 5	Total
PPP:								
Financing Agency 1								
Financing Agency 2								
Grant:								
Financing Agency 1								
Financing Agency 2								
Loans:								
Financing Agency 1								
Financing Agency 2								
GOM:								
TOTAL								

# 6.0 **PROJECT TIME SCHEDULE**:

6.1	Project Duration:	months
6.2	Expected Commencement Date:	•••••
6.3	Expected Completion Date:	••••

6.4 Important Project Stages or Mile Stones:

	Duration	Start	Completion	Remarks
		Date	Date	
Feasibility Study				
Approvals				
Design				
Tender				
Construction				
Interiors & Furniture				
TOTAL				

## 6.5 Risks associated with the project :( Tick the appropriate box)

Completion risks	Effective demand risks
Operation and maintenance risks	
Technological risks	Price Inflation risk

# 7.0 **PROJECT IMPLEMENTATION PROPOSAL**:

## 7.1 **Implementing Agency:** (*Tick only*)

## A. Pre-Feasibility Study

Options	Self	Self with	help of Go	vernment	Impleme	nting Agen	cies (*)
Available		MPILTS	MOHL	MOE	NDU	MREPU	MICT
Proposed							
Option							

## B. Feasibility Study

Options	Self	Self with h	elp of Gov	vernmen	t Implen	nenting Age	ncies (*)	Consultant
		MPILTS	MOHL	MOE	NDU	MREPU	MICT	Consultant
Proposed								
Option								
Reason			1	1	1		1	

## D. Design

Options	Self	Self wi	th help o	of Gove Ageno		t Impleme	enting	Consultant
		MPILTS	MOHL	MOE	NDU	MREPU	MICT	
Geo-Technical								
Architectural								
Structural Engineering								

Options	Self	Self v	vith help	of Gove Agenc		Implemen	iting	Consultant
		MPILTS	MOHL	MOE	NDU	MREPU	MICT	
Mechanical & Electrical								
Plumbing & Waste water								
Quantity Surveying								
Interior Design								
Site Dev. & Landscape								
Road Networks								

# E. Tendering

Options	Self	Self wit	h help of	Govern	ment In	nplementir	ng Agenci	ies (*)	Consultant
		MPILTS	MOHL	MOE	NDU	MREPU	MICT	СРВ	
Preparation of Tender Documents									
Preparation of Bills of Quantities/ Activity Schedule									
Floating of Tenders									
Tender Evaluation									
Award of works									
Contract Administration									

# F. Project Management

Options	Self					from Relev g Agencies		Resident Project Manager
		MPILTS	MOHL	MOE	NDU	MREPU	MICT	on contract
Proposed								
Option								
Reason								

# 7.2 Any Other Information:

•	•	•••	•	• •	••	•••	•	••	•	••	• •	••	••	•	••	•	••	•	••	•	••	•	• •	••	•	•••	•	••	• •	••	• •	••	••	•••	•	••	• •	•	••	•••	•	••	•••	••	••	••	• •	•••	••	•	••	• •	•	••	•••	•	••
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# 8.0 <u>APPROVAL</u>

8.1	Approved by Projects Plan Committee (PPC):	Yes	No
8.2	Approved by Cabinet:	Yes	No
8.3	Approval References:		

## 8.4 Funds Committed (Rs. M)

	Committed	Disbursed	Balance	Total
PPP:				
Financing Agency 1				
Financing Agency 2				
Grant:				
Financing Agency 1				
Financing Agency 2				
Loans:				
Financing Agency 1				
Financing Agency 2				
GOM:				
TOTAL				

### 8.5 **Project Cost Approved by the PPC & Cabinet (Rs. M):**

 8.6 Extra Financing required (Rs. M):

.....

## 8.7 Reasons for variation in Project Estimated Cost:

(\* Attach Supporting Details)

	-	Actual	-	Rev	-	Proj	ected	-	Total
	Up to FY	•••••	•••••	•••••	•••••	•••••	•••••	& Beyond	
GOM									
Financing									
Agency 1									
Financing									
Agency 2									
Financing									
Agency 3									
TOTAL									

# 8.8 Expenditure Incurred and Proposed (Rs. M):

# 8.9 Any Other Relevant Information:

* <u>Note</u> : MPILTS	Ministry of Public Infrastructure, Land Transport & Shipping
MOHL	Ministry of Housing and Lands
МОЕ	Ministry of Environment
NDU	National Development Unit
MREPU	Ministry of Renewable Energy and Public Utilities
MICT	Ministry of Information and Communication
	Technology

	SUPERVISING OFFICER	<u>MANAGER, FINANCIAL</u> <u>OPERATIONS</u>
Signature		
Name & Designation		
Date		

#### Annexure II

# PROJECT REQUEST FORM (PRF) Filling Instructions

#### A. General Instructions:

1. At the beginning please tick the relevant box indicating the purpose of approval required.

Submission of completed Project Request Form to Projects Plan Committee (PPC) is essential for all investment projects above Rs25 million seeking Budget Support /Funding for feasibility Study.

- The PRF is also essential for projects proposed to be financed through PPP, Grants or Loan arrangements.
- 3. For projects above Rs100 million the PRF shall be accompanied with a copy of Feasibility Report.
- 4. Additional information related to the project not covered in the PRF may be attached separately.
- 5. Information not applicable for a project may be filled as NA.
- 6. All project requests have to be signed by the Supervising Officer and the Manager, Financial Operations of the requesting Ministry/Department.

#### B. Instructions for Filling Specific Sections:

#### 1.0 <u>GENERAL PROJECT INFORMATION</u>:

- 1.1 Name of the Ministry/Department/Organisation proposing the project.
- 1.2 List the Programme, Activity, Specific Objective, Outputs, and Key Performance Indicators on which the project is based as mentioned in the Programme Based Budget.
- 1.3 Give the Project Title along with location, e.g, Proposed State Secondary School (F.1-V) Girls at Bambous. Also mention the actual/proposed Expenditure Identification Number as per the Chart of Accounts (COA).

### 2.0 **PROJECT BRIEF:**

- 2.1 Submission of a Feasibility Study Report is essential for all projects above Rs100 million seeking budget support or other funding options.
- 2.2 Describe briefly the Project needs highlighting and justifying the Economic/Social Need as per Programme.*You may attach a detailed project brief for clarification.*

2.3 Describe Project Requirements.

E.g, for a school project it may be a new classroom block with 12 new classrooms, two staircases and a new toilet block to provide for 400 additional students, site development works like playground, boundary wall etc.

2.4 Indicate the Built Floor Space Area provided on all floors for the proposed building project. For Roads, drains and other infrastructure give the length, width or other relevant measurements related to project size/scale.

- 2.5 Indicate the other alternative options explored apart from the proposed project for achieving the programme objectives. Also attach details of their *costs and reasons leading to the proposed choice.*
- 2.6 Confirm that the Similar Existing Facilities have been explored and their capacity is not sufficient to achieve desired programme objectives. Also attach supporting details like capacity /size of existing capacity vis a vis the present requirements. Also explain in the supporting documents how they are being used to their full capacity and the proposed project is required for additional requirements.
- 2.7 State the Priority number of this Project in the annual projects list of the spending Ministry/Department (1, 2, 3, 4, 5, 6, etc.).
- 2.8 State the consequences of deferring the project request.
- 2.9 Confirm whether the Basic Plans and Specifications for the project have been attached. For budget approval of Building /Infrastructure Projects it is essential to attach the following:
  - A. Proposed Site Plan Diagram of the proposed spatial needs of the project requirements including building footprint, massing, parking, access, circulation and open spaces, to include special constraints and requirements.
  - B. Infrastructure/Building Plans -- Generalised spaces representing programme elements organised in realistic relationships. (Architectural drawings)

- C. Building Volumes -- Generalised block diagrams representing building massing and configuration as it relates to the site and surrounding structures. (Architectural drawings)
- D. A schedule of general specifications, indicating the materials and form of construction proposed.
- E. Estimated Cost with break down of components.

## 3.0 SITE INFORMATION:

- 3.1 Confirm whether the required land is available?
- 3.2 Confirm whether the Environment Impact Assessment has been carried out?
- 3.3 Confirm whether all services like access roads, electricity, water, etc, are available at site?
- 3.4 Confirm whether the Land Ownership is clear free from any encroachment or other encumbrances.
- 3.5 Confirm whether the Parking Space is Available?
- 3.6 State the Site Features.
- 3.7 State any other Site Information like proximity to motorway, bus station, neighbourhood etc.

## 4.0 <u>COSTING INFORMATION:</u>

- 4.1 State the total estimated project cost (Rs. M) including VAT all inclusive.
- 4.2 Indicate the Unit Cost: For Buildings it may be Rs./Sq.m. For Roads it may be Rs. per Kilometer. For hospitals it may be Rs. per Bed or as applicable relevant to the unit measurement of the project proposed.

- 4.3 Give the break-up of the estimated cost components and Expenditure Schedule in (Rs. M). Further Details under various heads may be attached separately, if available.
- 4.4 All items related to project expenditure not included in cost estimate must be mentioned here.

For example: furniture, generators, computers, or others.

- 4.5 All Impacts on Recurrent /Operating Budget due to the proposed project are required to be mentioned:
  - A. Staffing Plan: List the number of existing staff and New Staff proposed after project implementation.
  - B. State the ensuing Operating/Recurrent Expenditure after completion of the project.
  - C. State the estimated savings due to the proposed project in rent, travel, maintenance or any other expenditure.
  - D. State the possible Revenue that can be generated from the Project in the form of rent, Fees, Tolls or others.
- 4.6 State any other Costing Information not covered above and give details of attachments if any.

#### 5.0 **FINANCING INFORMATION:**

- 5.1 Confirm whether all Financing Options like Public Private Partnership (PPP), Grant from Donors , Loans have been explored apart from financing from Government Budget (GOM).
- 5.2 Give reasons for Financing Option/s selected. They may be non commercial nature of project or others.
- 5.3 State the proposed financing proportions / percentages and Schedule of Expenditure. For Example: The percentages can be PPP-50% & GOM-50% or Loan-70%, Grant -20% & GOM-10% or others.

#### 6.0 **PROJECT TIME SCHEDULE:**

- 6.1 State the Project Duration in number of months.
- 6.2 State the Expected /Proposed Commencement Date of the project.
- 6.3 State the Expected Completion Date of the project.
- 6.4 State the Important Stages or Mile Stones within the project implementation with their duration, start date and completion dates.

#### 7.0 <u>IMPLEMENTATION PROPOSAL:</u>

7.1 Indicate the Government or Contractual Agencies to be involved in the Implementation of the project: (Tick only)

#### A. **Pre-Feasibility Study**

Pre feasibility of the project is to be essentially done by the owner Ministry/Department with the help of relevant Government Implementing Agencies.

#### B. Feasibility Study

Feasibility of the project may be done by the owner Ministry/Department with the help of relevant Government Implementing Agencies or by an appointed consultant (individual or firm) in the event of unavailability of assistance from the Government Agencies.

C. In case the land is not acquired, Land Acquisition may be proposed through the Ministry of Housing and Lands (MOHL).

*Note:* Procedures for land acquisition are lengthy. Therefore Ministries/Organisations/Departments shall provide a reasonable leeway (minimum one year) period for acquisition prior to implementation of the project. After acquisition, Ministries/Organisations/Departments shall also ascertain that the land is thereafter kept free from squatters and other encumbrances to avoid delays in the implementation of the project.

#### D. Design

The project may be designed by the inhouse professionals of the owner Ministry/Department with the help of other Public Bodies having expertise in similar works depending on nature, scale and complexity of project. However Consultants on contract may be hired in the event of unavailability of professionals from the Ministry/Department and/or other Public Bodies.

#### E. Tendering

Tendering for all public procurements shall be in accordance with the provision of the Public Procurement Act 2006. The Ministry/Department shall fully participate in tender preparation and evaluation procedures.

#### F. **Project Management**

For projects above Rs100 million and for a set of smaller projects totaling a value above Rs100 million, the Ministries/Departments may appoint on contract basis, project managers to professionally manage their projects. For projects less than Rs100 million the implementing agency in consultation with other concerned Ministries/Departments may designate an officer with relevant technical competency as the project manager in charge.

7.2 State any other Information related to the project.

#### 8.0 <u>APPROVAL</u>

- 8.1 Confirm whether the project has been approved by the PPC.
- 8.2 Confirm whether the project has been approved by the Cabinet.
- 8.3 State the approval Reference.
- 8.4 State the Funds Committed for the project at the last budget in Rs. M.
- 8.5 State the Project Cost approved by the PPC & Cabinet before the implementation stage in Rs. M.
- 8.6 Indicate the Extra Financing required due to variation in the Project Estimated Cost in Rs. M.
- 8.7 State the reasons for variation in Project Estimated Cost. Attach Supporting Documents and details.
- 8.8 State the amount spent and projected expenditure in the next budget in Rs. M.
- 8.9 Give any other Relevant Information on project status.

### FEASIBILITY STUDY REQUIREMENTS

The following section describes the key elements and submittal requirements of the Feasibility Study Report. They may vary based on nature and scope of projects. But in general a Feasibility Study may have the following standard sections:

- 1. Executive Summary
- 2. Project Need
- 3. Project Description
- 4. Project Analysis
- 5. Site Analysis
- 6. Project Financial Analysis
- 7. Facility Operations and Maintenance Requirements
- 8. Project Drawings/Diagrams
- 9. Appendix

Any other information the Ministry/Department believes would be helpful should also be included as an appendix to the document

#### 1.0 Executive Summary

The Executive Summary section presents essential and high level information about the project to agency or institution management and various stakeholders. It summarises material that is presented in subsequent sections. The material in the Executive Summary should not require an extensive technical background to understand.

#### 2.0 <u>Project Need</u>

The Project Analysis section describes the scope of the project, provides background information, analyses the project need (problem to be solved), identifies alternatives to meet the need, and the proposed solution.

The information in this section describes the mission, goals, objectives, and legislative or executive intent of the proposed project. The Ministry/Department's statement of need for the project and how it fits with the Ministry/Department's strategies and programmes.

This section contains an analysis of the project purpose, solutions, its reasonableness, cost and benefits, as well as anticipated time schedule for the project are also included.

This section also includes a description of each alternative considered. This includes not only various methods of meeting the needs of the project such as remodeling vs. new construction, but also includes the management method to be used.

### 3.0 <u>Project Description</u>

#### 3.1 **Project Scope**

Mission	—	Brief mission statement of the agency or institution as it relates		
		to the requested facility.		
Goals	_	Describe the goals that will be met by this project.		
Administration	_	Policy, programme, and services to be supported by the		
		project.		
Facility	_	Technical and facility needs.		

### 3.2 Background

Existing Facilities		Description of any other existing facilities
		that will be affected by this project.
Previous Action Taken		Provide project planning and request
		history.
Legislative or Executive Intent		Results of previous legislative, executive,
		or budget organisation actions that affect
		this project.

## 4.0 Project Analysis

**4.1 Problem Statement** – A statement that defines the specific problem or objective that creates the need for the project. The project should be consistent with the programme objectives and policies of the Ministry/Department and the government.

## **Existing Facility**

Statement of space, equipment and other related existing facilities. Also give the reasons why the existing facilities are not sufficient for the problems or requirements identified.

### Solution

Describe in detail the proposed solution to the problem. Identify the estimated useful life of the capital improvement, total project cost, and anticipated project milestones including date of completion. Also, describe how the project fits with the Ministries/Departments strategies and goals.

## 4.2 Identification of Requirements

This section identifies the requirements of all spaces to be included in the design of the facility. This section is the largest and most important section of a Pre-Feasibility/Feasibility Study. The requirements should not be unnecessarily restrictive in nature, but should clearly and directly express the needs of the organisation. This section also analyses all existing programme spaces that will have an effect on the proposed project.

## **Example for Requirements Heads:**

- Space with justification of each space as per programme
- Equipment
- Function The function of each space proposed as per programme.
- Condition assessment/serviceability Current condition of existing space.
- Other Special Requirements
- Telephone and IT requirements
- Voice, Data and Video Communications requirements
- Energy Systems
- Power Supply
- Water Supply

- Waste water system
- Internal Roads
- Landscaping, etc

#### **Future Requirements**

Describe any future phases or other facilities that will impact this project.

#### **Codes/Regulations**

List all codes and regulations that will have an effect on this project.

#### 4.3 Alternatives Considered

Give a brief description of each alternative that was considered and the reasons for rejecting each alternative that is not adopted.

#### 4.4 Affected Organisations and Stakeholders

List all other agencies or organisations to be affected by or involved in this project.

#### 4.4 **Project Management**

Identifies the preferred management method of design and construction to meet the agency or institution's desired schedule. Costs should be developed to reflect the proposed project management approach. The Feasibility Study should address the following issues:

 Management Organisation – This section describes the agency or institution's ability to manage the design and construction of the project. An assessment of the staff's technical capability, experience, and staffing needs in reviewing and approving design and construction work should be included. Identify any costs for consultant services or for additional staff.

- Methods of Accomplishment Identifies specific techniques to be used to manage the construction. The method selected will have an influence on the quality, cost, and timeliness of providing the facilities.
- Recommended Strategy Outlines duties of agency staff and any contracted consultants. Defines major steps of the process, and recommends methods of accomplishment and areas of responsibilities for each.
- Schedule -A milestone schedule for the project, including budget approval, design, bid, construction, equipment installation, testing, start-up, and full operation. Project phases, long lead items, and critical path milestones should be identified. The schedule should reflect the recommended specific method of acquisition as discussed above.

#### 4.6 Assumptions

Describe all assumptions used in defining the requested project.

#### 5.0 <u>Site Analysis</u>

The Site Analysis Section evaluates the various factors to be considered in situating the proposed project or the conditions of the predetermined/ designated site. This section should include a list of potential site locations and identify factors such as: zoning, accessibility, public transportation, geotechnical considerations, etc.

## **Evaluation of Potential Sites**

Identify all potential sites considered for this project. For each site explain or describe:-

- Cultural Factors
  - Site History
  - o Land Use, Ownership and Control
  - Economic Value
- Physical Issues and Constraints
  - Climate
  - Topography
  - o Geotechnical/Soils
  - o Utilities
  - Immediate Surroundings
  - General Services
- Regulatory Factors
  - Zoning Codes
  - o Local Requirements
  - o Environmental Regulations
  - o Building Codes and Requirements
- Access Issues
  - Site Accessibility
  - Transportation and Parking
- Utilities
- Preferred Site
  - o Advantages
  - o Disadvantages

### Conclusions

- Recommended Alternative
- Cost Estimate Comparisons (Life Cycle Cost Analysis of alternatives)
- Conceptual Drawings See Section 8 Project Drawings/Diagrams

## 6.0 <u>Project Financial Analysis</u>

The Project Budget Analysis Section contains a narrative of the major assumptions used in preparing the cost estimate, an outline specification of materials and it also includes cost benefit analyses of the alternatives considered. Following is a list of items to be included:

## Narrative

Written outline of major assumptions used for preparing the cost estimate.

## **Outline Specifications**

Basic summary of the project based on the major systems or components.

## **Detailed Cost Estimate**

A tentative estimate for the project is to be developed at this point. It should be understood that the estimates may be revised again during the design phase. Standard construction costs for like facilities provide an acceptable basis for estimating costs.

## Cost Benefit Analysis/Life Cycle Cost Analysis

Analyses of costs versus benefits and life cycle costs for the project are to be completed.

- Description of existing programme and facilities.
- Most appropriate alternative to solve problem.
- Other alternative(s) studied, including economic trade-offs.
- Alternative materials and systems to improve life cycle cost.
- The consequences of not proceeding with the preferred alternative should be analysed as an alternate.

## 7.0 Facility Operations and Maintenance Requirements

The Facility Operations and Maintenance Requirements Section defines the project's impact on the operating budget for the agency or institution over the next three years. Items such as programme staffing, operations, maintenance of the facility's mechanical and electrical systems, utilities, and internal rents should be discussed in this section

Items to be included in the Facility Operations and Maintenance Requirements Section include:

- Estimated additional costs of staffing for operations and maintenance of the facility.
- A plan for facility maintenance.

#### 8.0 <u>Project Drawings/Diagrams</u>

The Project Drawings/Diagrams Section contains conceptual (pre-schematic) drawings of the proposed capital construction project in enough detail to describe the project. Site diagrams illustrating various sites and site layouts should also be included. *Caution*! Drawings/Diagrams should be conceptual or pre-schematic only! Detailed drawings are not required for Feasibility Study.

Site Plans -- Diagram of spatial needs of the project requirements including building footprint, massing, parking, access, circulation and open spaces, to include special constraints and requirements.

Infrastructure/Building Plans -- Generalised spaces representing programme elements organised in realistic relationships (conceptual drawings).

**Building Volumes --** Generalised block diagrams representing building massing and configuration as it relates to the site and surrounding structures.