ENVIRONMENTAL PROTECTION AGENCY

PROJECT MANAGEMENT FRAMEWORK

Subah-Belleh Associates
(Management Consultants)

December 13, 2024

Monrovia, Liberia

Table of Contents

Foreword 4

Acronyms & Abbreviations 5

1.0 INTRODUCTION 6

1.1 Background 6

1.2 Benefits 6

1.3 Intended Users 7

1.4 Adaptability 7

1.5 Revisions 7

2.0 CONCEPTUAL FRAMEWORK 8

2.1 Project vs. Program 8

2.2 Key Elements in Project Management 8

2.3 Project vs. Operation Management 8

2.4 Project Management Principles 8

2.5 Project Management Life Cycle 9

2.6 Adopted Approach 10

3.0 CONCEPT PHASE 12

3.1 Idea Origination 12

3.2 Concept Paper 12

3.3 Processes and Activities 12

3.4 Concept Approval 13

4.0 INITIATING PHASE 14

4.1 Appointment of Project Manager 14

4.2 Appointment of Project Management Team 14

4.3 Project Charter 14

4.4 Processes and Activities 14

5.0 PLANNING PHASE 16

5.1 Consultations Informed 16

5.2 Project Management Plan 16

5.3 Processes and Activities 16

5.4 Approval of PMP 18

6.0 EXECUTION PHASE 19

6.1 Deliverables, Schedule, Budget 19
6.2 Monitoring & Evaluation 19
6.3 Processes and Activities 19
6.4 Periodic Project Status Reports 20
7.0 CLSOING PHASE 21
7.1 Stakeholders' Recognition 21
7.2 Final Project Status Report 21
7.3 Project Implementation Evaluation Report (PIER) 21
7.4 Processes and Activities 21
8.0 RISKS AND RISK STRATEGIES 23
8.1 Risks 23
8.2 Risk Strategies 23
8.3 Risk Management Plan 23
8.4 Processes and Activities 23
9.0 PROJECT MANAGEMENT 25
9.1 Importance of Project Management 25
9.2 Role of the Project Manager 25
9.3 Role of the Project Management Team 25
9.4 Required Skills-set 25
9.5 Beyond a Good Framework 26
10.0 PROJECT GOVERNANCE 27
10.1 Importance and Benefits of Project Governance 27
10.2 Project Steering Committee 27
10.3 Roles of the Project Steering Committee 27
10.4 Processes and Activities 28
APPENDICES 29
Appendix: Concept Phase 29
Appendices 2: Initiation Phase 29
Appendices: Planning Phase 35
Appendices: Execution Phase 37
Appendices: Closing Phase 38
Appendices: Project Management 40

DEFINITIONS 41
REFERENCES 47

Foreword

The Environmental Protection Agency is steadfast in its commitment to building a robust institutional capacity. This is crucial not only for fulfilling our mandate effectively but also for strengthening our partnerships within the global environmental community. A well-equipped and confident EPA is better positioned to secure the resource assistance necessary to successfully implement our projects and programs, particularly those addressing the critical challenge of climate change.

This Project Management Framework (PMF) represents a vital step in our institutional capacity-building efforts. Grounded in best practices of project management, this Framework serves as a comprehensive guide for the efficient and effective delivery of all EPA projects and services to the people and country. It streamlines project planning and implementation, enhancing the predictability of results, fostering greater experience sharing, and promoting valuable institutional learning across all departments and programs.

This document is intended as a valuable resource for all EPA professionals. The Department of Policy and Planning and the Department of Project Management hold the responsibility for ensuring compliance with this Framework.

Our commitment to effective and efficient environmental governance and management in Liberia is unwavering. This commitment extends to actively participate in global efforts to address pressing environmental issues of national and international concern, most notably climate change. The adoption and consistent implementation of this PMF will significantly contribute to our ability to achieve these important goals.

Emmanuel K. Urey Yarkpawolo, Ph.D.
Executive Director/CEO
Environmental Protection Agency of Liberia

Acronyms & Abbreviations

EPA	**-**	**Environmental Protection Agency**
PMF	**-**	**Project Management Framework**
UN	**-**	**United Nations**
RACI	**-**	**Responsible, Accountable, Consulted, Informed**
PMP	**-**	**Project Management Plan**
M & E	**-**	**Monitoring and Evaluation**
PIER	**-**	**Project Implementation Evaluation Report**
KIIs	**-**	**Key Informant Interviews**
SMART	**-**	**Specific, Measurable, Achievable, Relevant, Timely**
KPIs	**-**	**Key Performance Indicators**
FPER	**-**	**Final Project Evaluation Report**
PPCC	**-**	**Public Procurement Concessions Commission**

1.0 INTRODUCTION

This Chapter presents and describes the background and objectives of this Framework. It identities the benefits of utilizing the Framework and end users, as well as rationalizes flexibility in its utilization.

1.1 Background

The Environmental Protection Agency (EPA) undertakes many projects. The Agency has decided to create and establish a Program Management Department to be responsible for the management of projects.

This **Project Management Framework (PMF)** is the instrument that shall guide and ensure effective and efficient delivery of projects. It is based on standard and best practices in current management science. It offers a structured, repeatable approach (processes and tools) to project management. It will ensure that all projects of the Agency are conceived, initiated, planned, and executed in a consistent, systemic, manner across all departments. Resultantly, it will enhance predictability of successful project deliveries, improve information and experience sharing, leading to agency-wide institutional learning and increased productivity.

1.2 Benefits

This Framework presents the following benefits to the Agency:

- Presents project management principles, structures, processes, and tools that are repeatable and consistently applicable to various projects,

- Improves understanding between project team members, project governance bodies, and other stakeholders of the contexts, problems/needs, objectives, and project scopes,

- Provides a consistent way of monitoring project activities, identifying and addressing potential problems, as well as evaluating the performances of projects,

- Strengthens institutional learning from information and experience sharing between project management teams and stakeholders, and

- Enhances donor partners' confidence in the Agency's capacity and capability to manage donor supported environmental projects.

1.3 Intended Users

This Framework is a reverence document. The targeted users are Project Managers and Project Management Teams, as well as the Department of Policy and Planning, and the upcoming Department of Program Management. The Framework is also useful to other stakeholders such as the Executive Management Team, project sponsors, and department heads, program managers, and all those interested in the effective and efficient delivery of projects undertaken at the Agency.

1.4 Adaptability

This Framework "is not caste in stones". There is always the possibility of internal and external changes in the environments in which projects are conceived, planned, and implemented. Accordingly, its utilization should be adjusted to fit the specific situations (conditions and needs) in which each project is planned and implemented.

1.5 Revisions

As Charles Darwin puts it: "It is not the strongest species that survive, nor the most intelligent, but the ones *most responsive to change*". Thus, there will be a need to keep this Framework relevant over time by updating it as new management science, evidence-based information, processes, and tools become available.

Periodic reviews and revisions should be led by the Policy and Planning Department, in collaboration with the envisaged Program Department.

2.0 CONCEPTUAL FRAMEWORK

This Chapter presents and defines a project, a program, the principles of Project Management, and differentiates project management from operations management. It also describes the Project Management Cycle and rationalizes the adopted approach in this Framework.

2.1 Project vs. Program

A project is a single endeavor undertaken within a given period and budget towards achieving specific objectives. Project Management is the process of using proven structures, processes, and tools to manage the scope, time, and cost of a project.

A program comprises a collection of related projects that complement one another towards achieving higher end objectives. Program Management is thus the process of using proven project management structures, processes, and tools to manage several projects that constitute a program.

2.2 Key Elements in Project Management

Beyond objectives, structures and processes, Project Management involves managing three (3) key elements scope, time, and cost. A project has a defined scope or parameter; it is undertaken within a specified timeframe; and implemented within a definite budget. A change in one affects the other two (2).

2.3 Project vs. Operation Management

While project management entails managing activities to achieve planned objectives within specific budget and timeframe, operations management involves managing standard functions towards achieving an organization's mandate. Projects are scope, budget, and time bound. Operations often entail routine, repetitive, and continuous activities.

2.4 Project Management Principles

As informed by management science and current best practices, the Project Management Framework is guided by twelve (12) principles. These are identified and explained in the matric below.

Principle	Description
Stewardship	Those who manage projects are stewards. They are act on behalf of other people, both internal and external to the institution. Thus, they are under obligation to perform their duties with integrity, care, and trustworthiness.
Team	A Project Management Team comprises of persons with the requisite competence (knowledge, skills, and experiences). They work collaboratively to accomplish the project objectives effectively and efficiently. They do so within the cultures, policies, and regulations of the organization.

Stakeholders	Each project has stakeholders, both internal and external, to the organization. The Project Manager and his/her team should constructively engage stakeholders so that they are consistently informed and contribute to the success of the project.
Value	Every project has values. Value can be either quantitative or qualitative. Thus, each project should continuously be evaluated to ensure that the values they bring to the organization are worth the efforts and resources.
Systems Thinking	A project consists of interdependent and interacting parts and activities. Systems thinking entails taking a holistic view of how project parts interact with each other and with external systems.
Leadership	Effective leadership is required for project success. It entails such skills and traits as people-centered, motivation, and communications, as well as support to team needs. It demonstrates integrity and ethical conduct.
Tailoring	Each project is unique and the environment in which it is to be implemented may also be exceptional. Project success is thus a factor of adaptation of a project to its environment. Thus, every project should be designed, planned, and executed within context. Structures and processes should be made to fit the realities of internal and external environments to ensure effectiveness (achieving objectives) and efficiency (lower cost and time spent).
Quality	Quality focuses on meeting acceptable criteria for deliverables. This entails satisfying stakeholders' expectations and meeting established product or service requirements.
Complexity	Some projects are complex. This may be caused by scope, types and number of stakeholders, and environmental uncertainties. Thus, a project's complexity should be monitored and managed to ensure that adapted structures and processes lead to successful project delivery.
Risk	Risks impact projects. They can be positive (opportunities) or negative (threats). These should be addressed continuously throughout the project. Responses to risks should be appropriate and cost effective. Generically, opportunities should be maximized, and threats should be contained or minimized.
Adaptability & Resiliency	Adaptability is the ability to respond to changing conditions. Resilience is the ability to absorb negative impacts and to recover quickly from setbacks or failures. Project planners should build adaptability and resiliency into a project's team approach.
Change	Project outcomes will usually occasion change. Not all stakeholders will easily embrace change. Project teams should, therefore, prepare those to be impacted by the project. A structured approach to change can assist individuals or groups transition from current state to future desired state. Effective stakeholders' engagement can assist in change adoption.

Project Management Institute, (PMI, 2021)

2.5 Project Management Life Cycle

Every project has a life cycle. The cycle describes the various stages of a project. They stages are interlinked and meant to ensure successful delivery of projects.

This Framework adopts a five (5) phase model. Each of the five (5) phases entails a set of processes and activities and may involve different groups. These phases are identified and described below.

Concept: This is the phase in which a new project idea is conceived and developed into a Concept Paper. The Concept Paper presents the problem to be solved or the need to be met, as well as the impact to be derived by the organization. The concept is then sold to relevant stakeholders.

Initiation: This is the phase where the project is recognized as worth undertaking with substantial buy-in of stakeholders. The Concept Paper is elaborated. It clearly identifies and articulates the problem to be solved or the need to be met, as well as the benefits to be accrued to the institution.

Planning: This is the phase where detailed design and planning of the project occurs. Particularly, this is where the project scope is fully established, objectives exacted, quantitative and qualitative requirements of deliverables determined, strategy (approach) developed, key tasks and activities identified and sequenced, project schedule and budget prepared. In this phase, a formal plan (project document) is approved.

Execution: This is the phase where the project is implemented. This is where planned actions and key activities are carried out to achieve desired objectives. This phase commences with mobilizing required resources (money, people, infrastructure, equipment, materials, and supplies). Implementation is expected to ensure delivery of project objectives, within the constraints of scope, timelines, and budget.

Monitoring and Evaluation is a major sub-component of Execution. It entails tracking results (deliverables), as well as timelines (schedule) and costs (budget) and taking corrective actions, where necessary, to keep them in track and on course. It also entails assessing results, both in terms of quantity and quality, against planned results, to ensure that deliverables being produced meet planned criteria.

Closing: This is the phase where project implementation ends, and the project is closed. It is in this phase that final evaluation of objectives achieved, and resources expended, is undertaken. At this stage, a final project evaluation report (FPER), with findings, recommendations and lessons learned is prepared.

Based on the above stages, this Framework sets out structures, processes, and activities, as well as guidelines and tools for a reliable and consistent management of projects at the EPA.

2.6 Adopted Approach

As is discernable from the conceptual framework, projects and programs are interrelated: a program consists of several projects. Thus, a project may be a stand-alone undertaking, or a part of program.

This Framework adopts a Project Management approach. instead of a Program Management approach. This is **primarily** because projects vary in complexity, and therefore, it is better to develop a framework for a project than for several projects of a program that may vary in complexities, including scope, cost, and time.

Further, the principles, structures, processes, and tools applied in managing a project are similar and applicable to each project within a program.

Because of the above, best management science practices from literature reviews generically opts for the development of a Project Management Framework over a Program Management Framework.

Accordingly, the above has informed the adoption of this Project Management Framework. This model enhances simplicity, understanding, and subsequent applications to all projects, including those in a program.

3.0 CONCEPT PHASE

This chapter describes what is to be done prior to initiating a new project at the Agency. It may or may not be necessary, given the nature of the project being considered. However, should it be considered as necessary, then the processes and activities laid down in this chapter should be followed.

3.1 Idea Origination

Every new project begins with an idea. Those who conceive it are the originators. They usually come from within the organization: by a professional or technician from a department, division, section, or unit. They are the persons often involved in this phase of the project. They should, where appropriate, be assisted by professionals from either the Policy and Planning Department or the Program Management Department.

3.2 Concept Paper

A new project idea to be considered by the Agency shall be transformed into a Project Concept Paper by the idea originators. The paper shall present the project idea in a meaningful way. It should make a cogent, coherent, and logical case to stakeholders to accept the idea. These should include context and rationalization, particularly the problem to be solved or the need to be met. It should also include identification and description of the impact it would have on the Agency and its mandate.

3.3 Processes and Activities

The key processes and activities in this project phase that should be undertaken are as follows:

Identify Stakeholders: These should be groups, internal departments, and external organizations, that would likely have interest in or be impacted by the project. Examples include potential sponsors, Executive Management, the Department of Policy and Planning, and other relevant departments.

Assess the Readiness of the Agency: The capacity of the Agency should be assessed in terms of its preparedness to undertake the project. This readiness assessment should cover such areas as the mandate, strategic plan, organizational culture, existing policies, regulations, international protocols, Governance and Management, and lessons learned from past projects.

Determine Preliminary Project Costs: Financial resources are often a major constraint to moving project concepts forward. Preliminary costing of the project should be undertaken so that stakeholders have an impression of the likely cost tag of the project.

Assess Potential Impact: Any and every project to be undertaken by the Agency should either contribute to or support the Agency towards the achievement of its mandate. An assessment of the project's impact in this direction should be undertaken.

Identification of Potential Sponsors: Funding is always a constraint. Hence, external potential sponsors who are likely to provide funds should be identified.

Environmental Analysis: Every project operates in an environment. Environments provide uncertainties and risks. The environment includes subdivisions: political, economic, social, technological, and legal. The project should be placed in the appropriate environmental contexts.

Identify Potential Risks: All projects have risks. The types and levels of risks likely to be associated with the project should be identified. This should include potential challenges. How these would be addressed should be considered.

Concept Paper Development: This paper, as described in Section 3.2 above, should be developed.

Validate the Project Concept: The Concept Paper should be validated through a formal forum (meeting or workshop). This is to ensure that the project is technically sound, and that relevant stakeholders, especially internal stakeholders, and external sponsors, understand the project and would support it. Buy-in of the project concept by stakeholders is necessary to continue going forward.

3.4 Concept Approval

If the Concept Paper is endorsed and the project idea is accepted by stakeholders, a formal approval process shall be required. Depending on the nature and scope of the project, approval shall come from either Executive Management, or the Board of Directors, or both.

4.0 INITIATING PHASE

This phase moves the concept forward to initiation of the project. It builds on the Concept Paper by reviewing, elaborating and/or refining the key areas covered (context, scope, objectives, cost, and expectations). It lays the foundation with stakeholders by ensuring that there is a shared, better understanding of the project.

4.1 Appointment of Project Manager

Commencing a project will require a competent manager and Project Management Team. Given the nature and scope of the project and the skills-set required, Executive Management should identify and appoint a competent Project Manager and give him/her the responsibility and authority to proceed with the project.

4.2 Appointment of Project Management Team

Similarly, Executive Management should appoint a Project Management Team. Composition of the team should represent the required competencies (knowledge, training, skills, experiences) from the departments of relevance to the project. Ideally, the Policy and Planning Department, and the department in whose domain the project falls, should be considered for membership on the team.

4.3 Project Charter

The Project Charter is the key deliverable of this phase. This is a document that defines the project. It should, therefore, clearly describe the problem to be solved or the need to be met, and the envisaged results and outcomes of the project. It should formalize existence of the project and authorize the Project Manager/Management Team to expend approved resources on it.

4.4 Processes and Activities

The key processes and activities that should be undertaken in this phase are as follows:

Identify and Engage Project Beneficiaries: If the project is one where there are beneficiaries like local communities (such as West Point), they should be engaged. They should be given information on the project, how it benefits them, and what is expected of them. Their cooperation should be sought.

Conduct Stakeholders' Analysis: This should entail identifying the internal departments of the Agency and external institutions such as United Nations (UN) specialized bodies that are likely to have interest in or be affected by the project. Identifying stakeholders early provides opportunities to have their needs, requirements, and priorities considered in project planning.

In this context, stakeholders should be placed into three (3) categories: (i) those who will be key participants in the project; (ii) those who will have influence in the project; and (ii) those who will be affected by the outcomes of the project.

Prepare a Stakeholder Register: From the above, develop a register with the role of each stakeholder in the project. This is important in the management and governance of the project.

Engage Stakeholders Strategically: Stakeholders should be engaged as early as possible. Particularly, relevant departments of the Agency and external sponsors should be consulted and informed from the beginning of the project and along the way going forward. Communications will be an important ingredient.

Review Relevant Documents: These documents include the Project Concept Paper, the Strategic Plan, relevant legislations, governing policies and regulations, and international protocols and treaties to which the Agency is a signatory or has ascended to, and results of environmental analyses. These should be compiled and reviewed to inform development of the Project Charter.

Create RACI Matrix: This matrix identifies stakeholders' roles and responsibilities as it relates to specific actions and/or deliverables of the project. There are four (4) types of responsibilities in this Matrix. These are: *Responsible, Accountable, Consulted, and Informed (RACI)*. This matrix is developed by matching key project deliverables to identified stakeholders or the level of responsibility of stakeholders for each deliverable.

Develop Project Scope Statement: This statement describes the project objectives and project deliverables. It elaborates the problem to be solved or the need to be met, as well as the requirements to achieve them. It should be informed by works done in the previous phase.

Develop Budget Estimates: Based on all the information available at this point, preliminary budget estimates should be refined.

Develop a Schedule Estimate: Similarly, based on all the information available at this stage, a preliminary project schedule (timetable) should be prepared.

Document Assumptions, Constraints, Risks: Assumptions, constraints, and risks known at this stage should be documented. These will be useful in the Planning Phase.

Develop Project Charter: The nature and content of this document should be as described in Section 4.3 above.

5.0 PLANNING PHASE

This phase provides the details of the project and how it will be implemented. It reviews and refines previous works: scope, objectives, and, particularly, develops processes, activities, and tools required to achieve desired objectives.

5.1 Consultations Informed

This phase should be meaningfully consultative. It should be informed by inputs from internal stakeholders (departments) and external sponsors. Where desired and/or appropriate, the phase should be assisted by outside experts/consultants. Consultations and participation of all parties concerned will ensure better understating of and commitments to the resultant Project Management Plan (PMP) and its implementation.

5.2 Project Management Plan

The key outcome of this phase is the Project Management Plan (PMP). The PMP is a document that describes how the project will be executed, monitored, controlled, and closed. It is wholistic, comprehensive, and describes how it will be structured and delivered. If the project is complex, there should be a main PMP document, supported by several subordinate plans for some of the major components as exemplified in 5.3 below.

5.3 Processes and Activities

The planning process should accommodate the uniqueness of each project. Within this context, the following processes and activities should be undertaken, where applicable.

Develop Project Management Plan: The PMP should cover all components of the project: The focus should be on a logical linkage between context, problem/need, objectives, actions/activities, deliverables, timing, cost, and responsibility analyses (who will be responsible for what), as well as monitoring and evaluation. It should be informed by documents available from the Concept and Initiation Phases (Concept Paper, Project Charter, Stakeholder Register), and Agency assets.

Develop subordinate plans alongside the PMP: This would be required only of the project is complex. The subordinate plans should include, but not be limited to the following:

- **Scope Management Plan:** Project scope reflects all the activities that must be undertaken to achieve the objectives planned. Scope management is important to keep the project on track and within defined parameters. If this is not done, there could be "mission creep" and the project could go astray, into other directions. Thus, the goal is to keep project works as much as possible within defined boundaries.

- **Schedule Management Plan:** This should show the project schedule and how it will be managed. Projects operate within specific timeframes. The schedule comprises key project activities, arranged in sequence, each with estimated duration, and the resources required to carry them out. The schedule is a tool that ensures that project activities are performed, with the required resources, and within the timeframes in which they are to be undertaken.

- **Cost Management Plan:** This should show how the project will be funded and financially managed. This should include responsibility for mobilizing resources, tracking expenses, and authorizing expenditures, as well as methods and schedule for budget updates and expenditure reports.

- **Stakeholders' Engagement Plan:** This should show how stakeholders will be engaged. Stakeholders have expectations and these need to be managed. Stakeholders' management should recognize the inputs and information needs of both internal and external stakeholders. Strategies should focus on methods, content, direction, and frequency of engagement of stakeholders. Accordingly, there should be ways for periodically engaging stakeholders to receive their inputs and to pass on project information to them. Some stakeholders will be required to sign-off on certain decisions as the project is implemented.

- **Governance Management Plan:** This should show the structure and decision-making processes for managing the project. For example, it should define what types of decisions are to be made at what levels.

- **Quality Control Plan:** This should show how the quality of deliverables will be assured.

- **Risk Management Plan:** This should show how risks will be tracked, analyzed, and addressed throughout the project duration.

- **Communication Management Plan:** This should show how project information will be collected, analyzed, stored, accessed, and distributed throughout the project lifecycle. The essence is to ensure that stakeholder information needs, and expectations are met in a timely and convenient manner. There will be different types of information, such as internal and external, sensitive, and public, or general and detailed. Analyzing the stakeholders and their information needs will provide the basis for establishing the communications plan for the project.

- **Procurement Management Plan:** This should show how procurement of goods and services will be undertaken, including the hiring of contractors and external consultants, where applicable. Relevant Agency and regulatory protocols such as those of the Public Procurement Concessions Commission (PPCC) should be respected.

- **Change Control Management Plan:** This should show how changes during implementation, in any area of the project such as scope, key actions, schedule, and resources will be managed. Specifically, how *Change Requests* will be raised, evaluated, and approved.

- **Issue Management Plan:** This should show how major project issues will be analyzed and resolved during implementation.

Develop Project Status Reporting System: As the project is being implemented, stakeholders will need to be informed on the status of implementation. A Project Status Report format (Template) should be designed for circulating periodic project status report to stakeholders.

Develop Document Approval Mechanism: Some documents relative to the project will need to be circulated for review and approval. Similarly, a template should be designed for documents that need to be reviewed and signed off by designated parties.

5.4 Approval of PMP

The PMP should be subjected to validation and approval. The validation process should be led by the Department of Policy and Planning.

After validation, informed by the comments and inputs of stakeholders, particularly internal stakeholders, and sponsors, the PMP should be updated. After this, the revised PMP should then be approved by the Executive Management and/or Board of Directors of the Agency. After this, the project should be commissioned for implementation.

6.0 EXECUTION PHASE

This phase is on implementation of the project. It entails meticulously executing the tasks identified and described in the PMP and producing planed deliverables. The responsibility for effectively and efficiently implementing the project is that of the Project Management Team, headed by the Project Manager. The authority of the Team should be commensurate with the level of responsibility that the delivery of the project requires.

Implementation involves supervising people and managing project resources. It also entails managing stakeholders' expectations, resolving conflicts and challenges as they arise. But of paramount importance, it includes monitoring project performance and taking corrective actions where and when necessary, as well as evaluating deliverables to ascertain that they meet the standards of quantity and quality.

6.1 Deliverables, Schedule, Budget

The focus in implementing the PMP should be on three (3) essentials. ***First,*** it should ensure the production of deliverables, in both quantity and quality, required to achieve the project objectives. ***Second,*** it should ensure that timelines standards (schedule) are met. ***Third,*** it should equally ensure that project expenditures (cost) fall within the limits of the approved budget.

6.2 Monitoring & Evaluation

This phase requires and includes an effective monitoring and evaluation sub-component. Monitoring tracks processes and activities to ensure that implementation is on course and that issues, risks, and challenges are caught in time and addressed before they become serious.

Additionally, evaluation of results is undertaken as the project is being implemented to ensure that planned results (deliverables) and outcomes, as planned (quantity and quality) are being achieved.

6.3 Processes and Activities

The following processes and activities should be undertaken in this phase, where applicable.

- **Acquire and commit project resources:** After approval of the PMP, the relevant resources should now be acquired and placed at the disposal of the Project Management Team to implement the project. This will translate into funding the project budget and authorization to expend monies, following internal protocols, on project activities.

- **Prepare to implement activities:** Once fundings have been made available to proceed with execution, the Project Team should prepare to commence. This will mean different things per project or Project Management Team. However, it should include activities like hiring or seconding personnel from other departments to the project staff, undertaking procurement (goods & services), and establishing a project documentation system.

- **Kick-off the project:** There is no formal way to do this. If a formal commissioning is required, then proceed to doing so, or just proceed following the institutional culture of the Agency.

- **Execute the PMP:** This will entail coordinating all processes and activities of implementation. All means all: physical works, communications, employing relevant technologies, progress reporting, resolving conflicts, and monitoring and evaluation. These will entail providing effective operational direction and guidance (leadership) by the Project Management Team, as well as effective governance (oversight) of the Project Management Team by a higher body.

- **Implement project communications strategy:** Timely and reliable information to manage stakeholders' expectations is important. Stakeholders should be carried along as the project is being implemented. A communication strategy should consider forms such as regular emails, dedicated project internet platforms, regular briefings, periodic progress reporting, and other stakeholders' forums.

- **Monitor and evaluate the project:** Project implementation do not always produce the desired results. Things sometimes go wrong. When they do, corrective measures should expeditiously be put into place. Accordingly, project activities should systematically be tracked to ensure that the right things are being done at the right times. Further, results should be periodically assessed to ensure deliverables that are being produced meet the requirement specifications.

  Monitoring and evaluation should not only be limited to results (deliverables). It should also cover other essentials such as schedule (timetable), cost (budget), communications (reporting), stakeholders' engagement, and impact on the Agency and its mandate.

  Given the nature and scope of the project, monitoring could be done either monthly or quarterly, while evaluation could be undertaken quarterly, semi-annually, and annually.

- **Regular meetings of the Project Team:** Regular meetings of the Project Management Team should be undertaken. Regularity will be defined by the nature, scope, and stage of the project. Advisably, most projects will likely consider monthly meetings. The structure and focus of the meetings are relevant. Meetings should be productive. Of paramount importance, action items should be properly captured, and follow-up mechanisms established and implemented.

6.4 Periodic Project Status Reports

Project Status Reports should be periodically prepared and disseminated to stakeholders. These should be an integral part of M & E and communication strategies. Significant milestones achieved and challenges encountered should be highlighted in these reports. The objective here is to keep stakeholders, especially Sponsors and Executive Management, informed and consulted.

7.0 CLSOING PHASE

This chapter describes the Closing Phase of the project. It focuses on how project activities are closed, and final evaluation of the project is undertaken.

Sometimes, for various reasons, projects are discontinued. Stopping a project in mid-stream does not mean that the project has failed. Just as there are good reasons to undertake a project, there may also be good reasons to stop a project. In any event, whether a project stops halfway, or is terminated on schedule, the closing should be undertaken professionally.

7.1 Stakeholders' Recognition

The closure process should recognize and appreciate key stakeholders who contributed to the success of the project. Among those to be recognized and honored should include the Project Manager, the Project Management Team, and Sponsors. Gratitude is a worthy human value. Good organizations practice it.

7.2 Final Project Status Report

A final project status report should be prepared and circulated to stakeholders. It should contain the latest updated, information on the status of the project.

7.3 Project Implementation Evaluation Report (PIER)

The Project Implementation Evaluation Report (PIER) is an essential output of the closing processes. The report should contain the outcomes of the final assessment relative to effectiveness and efficiency of the project. It should, therefore, contain findings, conclusions, and recommendations, including ones on sustainability of outcomes. Particularly, it should derive lessons learned for utilization in future projects. Finally, it should identify post-project outstanding issues and make recommendations as how they should be settled.

7.4 Processes and Activities

The following processes and activities should be carried out during closing phase of a project:

- **Prepare for closure:** Review all relevant project documents and identify issues to be attended during the closure process. These may include unresolved issues, settlement of staff and contractors, turnover of equipment and facilities, and final project financials. Think through how each of these are to be addressed, either internally, or externally. Note that on some issues the advice and/or assistance of the Agency's legal unit may be warranted.

- **Conduct closeout process:** Conduct closeout activities as it relates to each of the issues identified, including the transfer of facilities, equipment, and unutilized resources to specified internal departments or external parties.

- **Complete final project status report:** Prepare and circulate to stakeholders the final project status report as mentioned in Section 7.2 above.

- **Archive final project records:** Catalogue, compile, and archive all project documents and records, including the PMP, project status reports, sub-contracts, approved requests of changes, and minutes of the Project Management Team.

- **Conduct contractor closeout:** Where there are contractors, review, and closeout their contracts in accordance with the terms and conditions of each contract. Suggestively, allow the Agency's legal unit to advise on this process to avoid unnecessary litigations.

- **Complete project financials:** Have the Agency Financial Management Department to complete final project financials for submission to the Sponsors and Executive Management.

- **Release staff, turnover facilities, and other resources:** Following relevant guidelines and practices of the Agency, or as approved by the Sponsors and Executive Management, release staff, and turn over facilities, vehicles, computers, equipment, and leftover materials and supplies to the relevant departments of the Agency or to external parties, as approved by either Executive Management or Sponsors.

- **Complete Post Implementation Evaluation Report (PIER):** Undertake a final project evaluation and prepare and distribute the report to stakeholders.

- **Conduct Lessons Learned:** Where a PIER process is not undertaken, conduct a Lessons Learned exercise either through a special forum of stakeholders, or through Key Informant Interviews (KIIs), or a survey of stakeholders, especially those who managed and participated in the project.

- **Closure Notes:** Where a PIER is not undertaken, prepare Closure Notes on the project for submission to the Sponsors and Executive Management.

8.0 RISKS AND RISK STRATEGIES

Every project will have risks. This is because the internal and external task environments in which projects operate are not constant. They are ever changing, and with changes come uncertainties. Uncertainties make it difficult to plan and execute activities with precision. Hence, it is important to track, analyze, and control ricks throughout implementation of a project.

8.1 Risks

Under new management concepts, there are two (2) types of risks. Negative risks that manifest themselves as threats, and positive risks that manifest themselves as opportunities. Threats have negative impacts on project objectives, while opportunities have positive impacts on project objectives. The benefit of good risk management is the confidence it gives to the Project Management Team that, despite risks, the team will eventually deliver the project successfully.

8.2 Risk Strategies

Risk strategies are the method planned and employed to manage risks when they occur. Risk strategies should seek to remove or minimize threats, while simultaneously exploiting or maximizing opportunities.

Generically, there are four (4) types of risk strategies:

- *Mitigation:* seeks to reduce the negative impact of the risk on a project,
- *Avoidance:* Seeks to eliminate the cause of the risk,
- *Transference:* Seeks to shift the risk and its impact to another party, and
- *Acceptance:* No plans: willing to accept the consequences of the risks.

8.3 Risk Management Plan

This plan could be an integral part of the PMP, if the project is small and simple, or included as a subordinate plan, if the project is large and complex. As indicated in Section 5.3 above, the plan should describe how risks will be identified, analyzed, and addressed, as well as monitored and controlled during project implementation.

8.4 Processes and Activities

The following processes and activities should be implemented in the management of risks for projects undertaken at the Agency.

Identify risks: Identify project threats and opportunities and document their sources and characteristics.

Analyze risks: Analyze the impact of each identified risk on the project. The information obtained should then inform further decision-making.

Plan the risk response: Develop the actions to be taken to remove or minimize the threats, and exploit or maximize the opportunities, both towards the achievement of project objectives.

Monitor and control: Track and evaluate the implementation of risk responses to ensure they are effective and efficient.

9.0 PROJECT MANAGEMENT

This chapter discusses the importance of project management and identifies and describes the skills-set required for a Project Manager as well as the Project Management Team.

9.1 Importance of Project Management

The Project Manager and the Project Management Team are the drivers of projects. Their collective role is to provide leadership and technical direction to implement project activities, produce deliverables, and achieve planned objectives. And this is to be done with regards to scope, schedule, and budget.

Collectively, they are responsible for coordinating works, tracking performances, holding responsible parties accountable, and resolving challenges and issues as they arise. The project succeeds only to the extent that they are on top of their game.

9.2 Role of the Project Manager

- Responsible for accomplishing the project objectives
- Strive to meet the triple constraints of project scope, time, and cost
- Supervise the Project Management Team
- Reports to the Project Steering Committee

9.3 Role of the Project Management Team

- Provide direction to project activities
- Manage shared resources across all aspects of the project
- Coach, mentor, and train employees on-the-job
- Coordinate communications with stakeholders
- Monitor compliance with project standards, policies, procedures

9.4 Required Skills-set

There are several skills a good project manager and project team should have. These include the following:

- **Planning and organization skills:** This entails setting good and clear (SMART) objectives, setting priorities, organizing work units, conducting meaningful forums such as meetings and workshops, and ensuring good record management.

- **Communication skills:** This entails transmitting understanding to subordinates, Project Steering Committee, sponsors, Executive Management, and other stakeholders. This is reflected in areas such as giving instructions, documentations, minutes, and status reports.

- **Integration skills:** This skill entail the ability to mix, combine, or incorporate various elements, structures, or processes meaningfully, such that the resulting outputs are capable for contributing to the achievement of desired results.
- **Leadership skills:** This entails the ability to provide direction, inspire and motivate people, build consensuses, and achieve planned results.

- **Team building skills:** Management is about doing work through people. Thus, this skill entails assisting team members work cohesively and harmoniously towards a shared goal, supporting and reinforcing the competencies of one another.

- **Budgeting skills:** This entails having basic knowledge of finance and accounting, ability to prepare and manage budgets, and understand concepts such as income, expense, credit, debit, vendor quotations, purchase orders, and reconciliation of invoices.

- **Negotiation skills:** This entails the ability to work with and/or influence people in reaching understanding, compromises, and agreements.

- **Conflict management skills:** This skill entails the ability to correctly resolve a problem in a way that those involve accept the solution and move forward with the project without further protests.

9.5 Beyond a Good Framework

Effective project management goes beyond building and implementing good structures and processes. Good judgment, people skills, and effective communication are required. Despite the best of structures and processes, unexpected situations and issues will arise. Good judgements, people skills, and effective communications will be required to deal with these situations and issues.

In the context of the above, the following best practices should be adhered to in the management of projects at the Agency:

Make timely decisions: Delayed decisions can negatively impact project work. Delays can compromise project effectiveness and efficiency in many ways. The Project Manager and Management Team must, therefore, ensure that decisions are made by the right people at the right time.

Delegate: Effective leadership demands that decision-making is delegated to middle and lower-level managers, professionals (particularly subject area experts), and technicians. In this way, those most knowledgeable about the issues get to make the decisions at the levels the issues exist.

Keep it simple: A streamlined decision-making structure and process will improve project effectiveness and efficiency. The simpler the structure and approach, relevant decisions will be made quickly by the right people at the right time.

10.0 PROJECT GOVERNANCE

This chapter describes the importance and role of governance in successful project delivery.

10.1 Importance and Benefits of Project Governance

While management and technical skills are essential, successful project delivery is equally built on good project governance. Governance deals with strategic directions and policy issues such as decision-making structures and processes. Good project governance should support project management to achieve effectiveness (planed results), reduce threats, maximize opportunities, and occasion the better use of resources (efficiency).

Good governance benefits a project in the following ways:

- Ensures that decisions are made by the right people,
- Provides strategic leadership (overall direction) to the project,
- Lays the basis for transparency and accountability,
- Provides corporate oversight that improves potential for success,
- Ensures the project maintains external sponsors and funding.

10.2 Project Steering Committee

The Executive Management of the Agency, in consultation with sponsors, shall establish a Project Steering Committee to oversee the work of every Project Management Team. The composition of the team shall be informed by the nature and scope of the project. Advisably, it should include a representative of the Policy and Planning Department and the envisaged Program Management Department.

10.3 Roles of the Project Steering Committee

The Steering Committee shall perform the following duties:

- Provide strategic oversight of the project, including determining decision-making structures: levels and positions,

- Develop project-specific policies and regulations consistent with internal policies, regulations, and practices of the Agency,

- Supervise the Project Management Team, including reviewing and passing on requests and reports received, and

- Resolve conflicts and issues brought to its attention by the Project Management Team through the Project Manager.

10.4 Processes and Activities

Within the context of the above, the following processes and activities shall be undertaken.

Identify decision makers: Identify stakeholders that have decision-making authority, including the levels and areas. For examples, who approves budgets, procurements, staff secondments, and request for changes in the project.

Identify decision making thresholds: Identify thresholds so that project staff understand which levels of decisions can be made and by whom. Thresholds can be in terms of scope, schedule, and cost.

Define the governance process: Lay out a clear process of how decisions are to be made. This will depend on the types of decisions. Some decisions may require formal meetings, while others can be made through email, project IT platform exchanges. These provide records for future consultations in cases of conflicts or contentions.

APPENDICES

Appendix: Concept Phase

1.1: Checklist

This checklist identifies the sample activities/documents that should be completed during this phase. Other activities/documents may be included as necessary.

Activity/Document	Responsible Party	Date of Completion
Environmental analysis		
Prelim establishment of objectives		
Assessing impact on the Agency		
Prelim Stakeholders Analysis		
Identification of possible sponsors		
Concept Paper		
Include other Activities/Documents		

Appendices 2: Initiation Phase

2.1 Project Charter

Project Name: _____
Project Manager _____
Project Manager _____

Project Objectives:

_____

_____

Project Envisaged Benefit to Agency

1. _____

2. _____

Project Scope Statement:

Revision & Approval

Reviewed by: _____ **Date** _____
Name & Signature

Approved by: _____ **Date** _____
Name & Signature

2.2 RACI Matrix Template

Key Tasks	Person A	Person B	Person C	Person D
Task 1				
Task 2				
Task 3				
Task 4				
Task 5				

Notes:

R = Responsible
A = Accountable
C = Consulted
I = Informed

2.3 Project Status Report Template

Project Name: _____
Project Manager: _____
Reporting Period: _____
Date Submitted: _____

SUMARY

Item	Current Status	Previous Status	Summary (Brief Synopsis)
Project Status	On Time	Delayed	Brief Synopsis)
Scope			
Schedule			
Cost			

TASK

Task	Status	Objective	Planned Completion Date	Progress Complete	Deliverable
Activity 1	In progress	Planed objective	Planned Date	25%	In progress
Activity 2					
Activity 3					
Activity 4					

Revision & Approval

Reviewed by: _____ **Date** _____
Name & Signature

Approved by: _____ **Date** _____
Name & Signature

2.4 Stakeholder Registry

Name of Organization	Representative	Email/Cellphone	Expected Roles

2.5 Project Document Approval Template

Document Name:
Description:
Date:

Prepared By (Print Name)	Project Role	Title/ Organization
Prepared By (Signature)		**Date**

Reviewed By (Print Name)	Project Role	Title/ Organization
Reviewed By (Signature)		**Date**

Approved By (Print Name)	Project Role	Title/ Organization
Approved by (Signature)		**Date**

2.6 Phase Checklist

This Checklist identifies all activities/documents that the project team should ensure are completed in this phase. It is a working list and should, therefore, be updated going forward. Because projects differ in types, scope, and complexity, all projects will not necessarily include all these activities/documents.

Activity/Document	Responsible Lead	Estimate Date of Completion
Concept Document		
Environmental analysis		
Problem/Need Definition		
Objectives Refinement		
Sponsors identification		
Scope Statement & Sign-Off		
Stakeholders Analysis		
Schedule and milestones		
Resource Requirements		
Risks Identification		
Budget		
Communications		
Vendors		
Organizational Assets		
Contractors		
Project Charter		
Add other activities/documents identified		

Appendices: Planning Phase

3.1 Deliverable vs. Requirements

A deliverable is a result of a project. It enables the outcomes that the project was undertaken to create. Deliverables reflect requirements, scope, and quality.

A requirement is a condition that is necessary to be present in a deliverable to satisfy the problem or need for which the project is being implemented.

Good requirements meet the following criteria:

- **Clear:** There is only one way to interpret the requirement.
- **Concise:** The requirement is stated in as few words as possible.
- **Verifiable:** There is a way to verify that the requirement has been met.
- **Consistent:** There are no contradictory requirements.
- **Complete:** The requirements represent the entirety of the current project needs.
- **Traceable:** Each requirement can be recognized by a unique identifier

There is a need to ensure that requirements are clearly identified, defined, and understood. Lack of these, can lead to rework, scope creep, customer/organizational dissatisfaction, budget overruns, schedule delay, and overall project failure.

3.2 Project Communications Plan

Planning communication for a project entail considering the following:

- What information does each stakeholder need?
- Why should information be shared with stakeholders?
- What is the best way to provide information?
- When and how often is information needed?
- Who has the information needed?

Sample Communication Matrix

Description	Audience	Channel	Frequency	Owner
Project Status Report	Internal Stakeholders Project Team Members	Email	Weekly	Project Manager
Virtual Project Team Meeting	Project Team Members	Zoom	Monthly	Project Manager
External Stakeholders' Updates	External Stakeholders Project Management Team	Zoom	As Needed	Project Manager
Milestones and Deliverables Updates	Project Team	Email	As Needed	Project Team Members
Project Check-Ins	Project Team	Slack	Daily	Project Team Members

3.3 Scheduling Process

Predictive approaches follow a stepwise process as follows:

- **Step 1.** Decompose the project scope into specific activities.
- **Step 2.** Sequence related activities.
- **Step 3.** Estimate effort, duration, people, & resources required to complete activities.
- **Step 4.** Allocate people and resources to the activities based on availability.
- **Step 5.** Adjust sequence, estimates, & resources until an agreed-upon schedule is achieved.

Appendices: Execution Phase

4.1 Types of Project Subordinate Plans

A plan is an identified means of accomplishing an objective. The project team may develop a Project Management Plan that include all plans or chose to develop subordinated plans to the main Project Management Plan. The decision as to what option to take is usually informed by the nature or complexity of the project. Some subordinate plans that could be developed are as follows:

Communications management plan. This plan describes how, when, and by whom information about the project will be administered.

Cost management plan. This plan describes how costs will be planned, structured, and controlled.

Procurement management plan. This plan describes how the project team will acquire goods and services for the project from outside of the performing organization.

Quality management plan. This plan describes how applicable policies, procedures, and guidelines will be implemented to achieve quality objectives.

Requirements management plan. This plan describes how requirements will be analyzed, documented, and managed.

Resource management plan. This plan describes how project resources are acquired, allocated, monitored, and controlled.

Risk management plan. This plan describes how risk management activities will be structured and performed.

Scope management plan. This plan describes how the scope will be defined, developed, monitored, controlled, and validated.

Schedule management plan. This plan establishes the criteria and the activities for developing, monitoring, and controlling the schedule.

Stakeholder engagement plan. This plan identifies the strategies and actions required to promote productive involvement of stakeholders in project decision making and execution.

4.2 Measuring Performance

Measuring performance takes resources, time, and efforts. Key Performance Indicators (KPI) are indicators against which performance are measured. The indicators should have the characteristic of being SMART. This means:

Specific: They should be precise as to what is being measured.

Measurable: They should be capable of assessing what is being measured.

Achievable: They should be attainable within the context of the particulars of the project.

Relevant: They should be appropriate to the performance or objectives being measured.

Timely: Data for the indicator should be collected, processed, and reported on a timely basis.

Performance measures are used for multiple reasons, including:

- Evaluating performance of the project and project team,
- Tracking the utilization of resources, work completed, and budget expended,
- Demonstrating accountability,
- Providing information to stakeholders,
- Assessing whether project deliverables are on track to deliver planned benefits,
- Focusing conversations about trade-offs, threats, opportunities, and options; and
- Ensuring the project deliverables will meet acceptance criteria.

Appendices: Closing Phase

5.1: Lessons Learned Questions

Examples of questions to ask when soliciting views on lessons learned are as follows:

- What worked well, or did not work well for the project or for the project team?
- Next time, what needs to be done differently?
- What surprises did the project team need to deal with?
- What project circumstances were not anticipated?
- Were project objectives achieved? If not, what changes need to be made to meet objectives in the future?
- Was the project properly organized and staffed?
- Where the processes clearly defined and followed consistently by all team members?

- Did stakeholders understand their roles, responsibilities, and authority?
- Did project staff receive adequate training?
- Did the project schedule encompass all needed tasks for each phase?
- Were project tasks clearly defined so that team members understood which tasks they were responsible for and when they were due?
- Did the deliverables meet the specified requirements of the project?
- Where the sponsor(s) satisfied with the deliverables?
- Did the project stay within scope?
- Were cost budget met?
- Was the schedule met?
- Were risks identified and mitigated?
- Were problems or issues resolved in a timely and adequate manner?
- Did the components of the project management methodology that was used work well?

5.2: Closing Process Phase checklist

This checklist is generic. It can be adapted to any project based on the specific requirements of the project.

- Formal hand-off
- Settle all project staff
- Closeout all contracts
- Take inventories
- Turn over equipment, facilities, materials, supplies
- Review lessons learned
- Measure stakeholders' satisfaction
- Prepare the project closeout report
- Complete Project Implementation Evaluation Report
- Complete project financials
- Get signoffs from stakeholders
- Archive the project

Appendices: Project Management

6.1 Some Factors of High Performing Teams

Open communication: An open and safe communication within the team. This allows for productive meetings, brainstorming, and problem solving.

Shared understanding: The purpose for the project and its benefits are held in common among team members.

Shared ownership: Project team members feel ownership of the outcomes of the project. This motivates them to perform satisfactorily.

Trust: Project team members trust each other and are willing to go the extra distance to deliver success.

Collaboration: Project teams collaborate and work with each other rather than work in silos or compete. Collaboration tends to generate more diverse ideas and end up with better outcomes.

Adaptability: Project teams adapt the way they work to the environment in which the project is being implemented. This leads to project effectiveness.

Resilience: When issues or failures occur, high-performing project teams recover quickly.

Empowerment: Project team members are given the opportunity to make decisions about the way they work rather than being micro-managed. This leads to better performance.

Recognition: Project teams are recognized for their performance and achievements. This motivates them to work harder and better. Appreciation reinforces positive team behavior.

6.2 Project Team Activities

Project work keeps the project team focused and project activities running smoothly. This includes, but is not limited to the following:

- Managing the flow of existing work, new work, and changes to work,
- Keeping the project team focused,
- Establishing efficient project systems and processes,
- Communicating effectively with stakeholders,
- Managing facilities, equipment, supplies, and logistics,
- Supervising contractors, including professionals and vendors,
- Monitoring challenges and issues that can affect the project; and
- Enabling project learning and knowledge transfer.

DEFINITIONS

The definitions below present the meanings, interpretations, descriptions and characterizations of key words or concepts used in this Institutional Project Management Framework to facilitate or enhance its understanding.

Acceptance Criteria. A set of conditions that is required to be met before deliverables are accepted.

Assumption: Factors that, for planning purposes are considered to be true, real, or certain without proof or demonstration.

Authority. The right to apply project resources, expend funds, make decisions, or give approvals.

Baseline: Original approved project scope, timeline, and cost.

Budget. The approved estimate of financial cost of a project, or any of its components, or scheduled activity.

Change. A modification to any deliverable, project management plan component, or project document.

Change Request. A formal proposal to modify a document, deliverable, or baseline of a project.

Closing Process. The processes performed to formally complete or end a project.

Communications Management Plan. A component of the project management plan that describes how, when, and by whom information about the project will be administered and disseminated.

Complexity. A characteristic of a project, or its environment, that is difficult to manage due to human behavior, system behavior, and ambiguity.

Constraint. A limiting factor that affects the execution of a project or any of its processes and activities.

Contingency. An event or occurrence that could affect the execution of a project, which may be accounted for with reserve time or funds.

Contingency Reserve. Time or money allocated in the schedule or budget for risks that could occur.

Contract. A mutually binding agreement that obligates external providers to provide determined services or products to a project.

Cost Management Plan. A component of a project management plan that describes how costs will be planned, structured, and controlled.

Deliverable. Any unique and verifiable product, result, or service that is required to be produced by a project.

Duration. The total number of work periods required to complete an activity expressed in hours, days, or weeks.

Environmental Factors. Conditions, not under the immediate control of a project team, that can either negatively or positively impact the project.

Estimate. A quantitative assessment of the likely amount or outcome of a variable, such as project costs, resources, efforts, or durations.

Interpersonal Skills. Skills used to establish and maintain relationships with other people.

Issue. A current condition or situation that may have an impact on project objectives. It is usually a matter that is not yet settled.

Knowledge. A mixture of experience, values and beliefs, contextual information, intuition, and insight that people use to make sense of new experiences and information.

Lessons Learned. The knowledge gained during a project, which shows how project events were addressed or should be addressed in the future, for the purpose of improving future performance.

Method. A means for achieving an outcome, output, result, or project deliverable.

Milestone. A significant point or event in the implementation of a project or program.

Monitor. Collect project performance data, analyze by comparing actual performance results with desired performance results, prepare and disseminate performance information report.

Objective. Something toward which work is to be directed, a purpose to be achieved, a result to be obtained.

Opportunity. A risk that would have a positive effect on one or more project objectives.

Outcome. The ultimate result or consequence of a project.

Plan. A proposed means of accomplishing an objective.

Procurement Management Plan. A component of the project management plan that describes how a project team will acquire goods and services from outside of the performing organization.

Program. A collection of related projects that complement one another towards achieving higher end objectives.

Project. A single endeavor undertaken within a given period and budget towards achieving specific objectives.

Project Charter. A document issued by the project initiator or sponsor that formally authorizes the existence of a project and provides the project manager and project management team with the authority to apply organizational resources to project activities.

Project Concept Paper: A formal elaboration of a project idea in a way that sells the project to stakeholders, including sponsors. It is a descriptive narrative of the project idea, objectives, undertakings, and expected impact.

Project Governance. The framework, functions, and processes that guide project management activities to achieve project deliverables to meet organizational goals.

Project Management. The application of knowledge, skills, tools, and techniques to project activities to meet the project objectives. It involves managing three (3) things: scope, time, and cost. A change in one affects the other two (2).

Project Management Body of Knowledge. A term that describes the knowledge within the profession of project management. It is the recognized standard for the Project Management profession.

Project Management Framework: A set of processes, tasks and tools that provide structure and guidance for the planning and execution of projects. The framework helps organizations map and track the progression of project phases, from concept to closure.

Project Management Plan. The document that describes how the project will be executed, monitored, controlled, and closed.

Project Management Team. The members of the project team who are involved in directing project management activities.

Project Manager. The person assigned by the performing organization to lead the team that is responsible for achieving the project objectives.

Project Phase. A collection of logically related project activities that culminates in the completion of one or more deliverables.

Project Schedule. A calendar that presents linked activities with planned dates, durations, milestones, and resources.

Project Scope. The work to be performed to deliver project results or deliverables.

Project Scope Statement. A narrative description of the project scope (work to be performed) and resulting deliverables.

Project Steering Committee: A governance body of stakeholders who support and provide oversight of the Project Management Team. It provides direction and make decisions outside the project team's authority.

Quality. The degree to which a set of inherent characteristics fulfills requirements such as for project deliverables.

Quality Management Plan. A component of the project management plan that describes how applicable policies, procedures, and guidelines will be implemented to achieve quality deliverables and/or objectives.

Register. A written record of regular entries for evolving aspects of a project, such as risks, stakeholders, or defects.

Regulations. Requirements imposed by a governmental body, including applicable administrative provisions such as the Public Procurement Concessions Commission (PPCC).

Report. A formal record or summary of information.

Requirement. A condition or capability that is necessary to be present in a project deliverable: product, or service, or result, to satisfy acceptance.

Requirements Management Plan. A component of the project management plan that describes how requirements will be analyzed, documented, and managed.

Resource Management Plan. A component of the project management plan that describes how project resources will be acquired, allocated, monitored, and controlled.

Responsibility. An assignment that can be delegated within a project management plan such that an assigned resource (person) incurs a duty to perform the requirements of the assignment.

Result. An output from performing project management processes and activities; a project deliverable.

Risk. An uncertain event or condition that, if it occurs, has a negative or positive effect on one or more project objectives.

Risk Management Plan. A component of the project management plan that describes how risk management activities will be structured and performed.

Risk Strategies: Generically, there are four (4) risk strategies: (i) *Mitigation:* Reduces the negative impact of a project; (ii) *Avoidance:* Seeks to eliminate the cause of the risk; (iii) *Transference:* Seeks to shift the risk and its impact to a third party; and (iv) *Acceptance:* No plans: willing to accept the consequences of the risks.

Role. A defined function to be performed by a stakeholder or project team member.

Schedule Management Plan. A component of the project management plan that establishes the criteria and the activities for developing, monitoring, and controlling the project calendar.

Scope: A narrative that describes the characteristics and/or coverage of a project and the totality of its products or services.

Scope Creep. The uncontrolled expansion of project scope without adjustments to time, cost, and resources.

Scope Management Plan. A component of the project management plan that describes how the scope will be defined, developed, monitored, and controlled.

Sponsor. A person, or group, or organization that provides resources and support for the project and is interested in achieving planned project results (objectives).

Stakeholder. An individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project. A stakeholder maybe actively involved in the project.

Stakeholder Analysis. A method of systematically gathering and analyzing quantitative and qualitative information to determine whose interests should be considered throughout the project.

Stakeholder Engagement Plan. A component of the project management plan that identifies the strategies and actions required to promote productive involvement of stakeholders in project decision making and execution.

Stakeholder Register. A project document that includes information about project stakeholders including an assessment and classification of project stakeholders.

Standard. A document established by an authority, custom, or general consent as a model, or an example.

Status Report. A report on the status of a project at a point in time.

Subject Matter Expert: A person who has the level of required expertise in performing a specialized job or task relevant to the project.

Tailoring. The deliberate adaptation of approach, processes, and management to make them suitable to the environment and the work at hand.

Template. A partially complete document in a predefined format that provides a defined structure for collecting, organizing, and presenting information and data.

Threat. A risk that would have a negative effect on one or more project objectives.

Validation. The assurance that a product, service, or result meets the needs identified by stakeholders.

Variance. A quantifiable deviation, departure, or divergence away from a known baseline or expected value.

Verification. The evaluation of whether a product, service, or result complies with a regulation, requirement, specification, or imposed condition.

REFERENCES

The Standard for Project Management and A Guide to the Project Management Body of Knowledge (PMBOK Guide 7th Edition), 2021

State of California, Project Management Framework, Department of Technology, California Project Management Office

Twelve (12) Principles of Project Management, Project Management Institute, 2021

Project Management Framework, Introduction to Project Management (CIVL 694), 2018

A Guide to the Project Management Body of Knowledge (PMBOK Guide), Project Management Institute, 2017

Project Management Book of Knowledge (PMBOK Guide), Project Management Institute, 2005

Project Management Book of Knowledge (PMBOK Guide), Project Management Institute, 2015