PAN

PAYMENTS ASSOCIATION OF NAMIBIA

NPS Project Management Framework

Version 1.7

Developed by

PAN PMO

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EXECUTIVE SUMMARY

The Payment Association of Namibia (PAN) as mandated by the Payment System Management Act of 2003 to manage the national payment system and set technical standards has developed a project management framework (PMF) that provides a set of guidelines and standards required for implementing industry-orientated projects that have an impact on the National Payment System (NPS).

The framework is responsive to the industry's NPS Vision 2020 strategic initiative to develop and implement an industry project management framework as one of the ways to achieve the vision's strategic measure of having 95% of industry projects completed on time and on budget by the year 2020. It is also supportive of the Payment System Management Act of 2003 (Act No. 18 of 2003) as amended and its underlying determinations, directives and guidelines.

This framework is for guiding NPS industry projects, approved by the PAN prioritization committee that require industry collaboration in carrying out industry testing or development of specifications, standards and operation rules that enhances the national payment system functionality and interoperability. Such collaborative projects could be industry or individual participant driven.

In line with international best practice, this project management framework is aligned with one of the world's best resources on project management, the Project Management Body of Knowledge (PMBOK®) guide, a product of the Project Management Institute (PMI). While the PMBOK® acts as a guide, this framework is tailored to be responsive to the unique needs of the Namibian NPS development and maintenance.

Project governance is set up in line with existing structures in the NPS where entities such as the Bank of Namibia, PAN Management Council, Prioritization Committee, PCHs, PAN PMO etc have varying levels of influence on projects. Based on the nature of the project, further governance structure specific to the project such as the steering committee, project sponsor and change control forum can be set up.

The framework does not prescribe a funding model but provides guidance and recommends models that can be used by PCHs, steering committee or any other body tasked with deciding on project funding. The main factor to consider when deciding on source of funding should be the beneficiary of the project's output.

Projects progresses through a project life cycle where all stages such as initiating, planning, executing, monitoring and control as well as closing are well defined. Project team members are expected to use processes as defined in the PMBOK® guide in order to effectively achieve the project objectives.

The first process to complete during the initiating stage of the project is to develop a project charter, where the project objective, high level requirements, estimated time, estimated budget and project funding would be indicated. The project charter must also include the project sponsor, steering committee, project manager and identified stakeholders. The sample of the project charter is attached as appendix B. Before appointment of the sponsor and project manager, the project initiation must be driven at the PCH or at the organisation that is initiating the project by following the PAN change request process.

The project must be tabled at the prioritization committee where it would be ordered on the industry project priority list and allocated the implementation time slot based on well-defined fair and transparent prioritization criteria as developed by the prioritization committee and approved by the PMC.

After initiation, including the approval and sign off of the project charter, the project manager and the team can start with project planning by developing a project plan which must contain the following elements:

- Project Scope
- Project Schedule
- Project Budget
- Project Quality Management Plan
- Project Human Resources Management Plan
- Project Procurement Plan
- Project Risk Management Plan
- Stakeholder Management Plan
- Project Communication Plan

The project plan must be approved and signed off by the project steering committee or project sponsor after which the project enters the execution as well as monitoring and control stage where the following processes are to be carried out:

- Acquire, develop and manage project team
- Direct and manage project work
- Control scope, schedule and costs
- Conduct and control procurements
- Perform integrated change controls
- Perform quality assurance
- Control risks
- Manage stakeholder engagements
- Manage and control communications

Once the set criteria for closing the project has been met, the project closure processes must begin including formerly closing procurements using a well-defined process. The main outcomes of this stage are the project closure report including lessons learnt and filing of documentations that have been generated throughout the project.

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Glossary of Project Terms

TERM	DEFINITION
Activity	A specified piece of work that need to be completed.
BAN	Bankers Association of Namibia
BRD	Business Requirements Definition
Budget	The amount of money allocated for the project.
Change control board/forum	A forum made up of project stakeholders responsible for reviewing and accepting or rejecting proposed changes to the project.
Communications	The process of relaying and receiving project information so that all concerned parties have the same understanding.
Contract	A legal, mutual binding document between different parties covering the terms and conditions by which the work must be completed.
Critical Path	A sequence of activities with longest combined duration on the project schedule network diagram which determines the project's duration.
Duration	The amount of time it takes to complete an activity, phase or project.
Gate	A specific project related milestone, indicating that all participants reached or completed the milestone.
FSD	Functional Specification Document
NPS	National Payments System
NPS Change Request	The request to make changes to the NPS systems, rules or standards that may result into a project.
NPS Industry project	An industry or individual participant driven project that require industry collaboration to ensure NPS systems interoperability and functionality and which has been approved by the prioritization committee.
PAN	Payments Association Namibia
PCH	Payments Clearing House
Phase	A distinct stage of the project deliberately defined to deliver related project deliverables.
PMBOK	Project Management Body of Knowledge
PMC	PAN Management Council
PMF	Project Management Framework
PMI	Project Management Institute
PMO	Project Management Office
Prioritization Committee	The sub-committee of the PAN management council responsible for approving projects to be placed on the NPS project priority list and ordering them as per the defined prioritization criteria.
Procurement	Sourcing of products or services from an external organisation.
PROD	The technical production environment for live operations.
Program	A group of related projects that a managed together by one programme manager.

Project	A temporary endeavour with defined start and end date that creates a unique product or service.
Project Change Request	A request to change any part of the project management plan after it has been approved.
Project Charter	The project initiation document that introduces that the project and serves as an authorization for the project to begin.
Project Manager	The person responsible for providing leadership to the team and managing the project and its associated work to ensure that expected results are obtained.
PSMB	Payment System Management Body
RAM	Resource Allocation Matrix
Requirement	A set of measurable customer wants and desires.
RFP	Request for Proposal
Risk	An uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives such as scope, schedule, cost and quality.
Schedule	A timeline for the project including start and end dates for project activities.
Scope	The amount of work required to complete the project.
SIT	System Integration Testing
Sponsor	An executive in the organisation who can assign resources and can make final decisions on the project.
Stakeholder	People, groups and organisations with influence on the success of project or have interest on the project because they might be affected by the project activities or outcome.
Steering committee	A committee made up of stakeholders responsible for providing direction and can make final decisions on the project.
UAT	User Acceptance Testing
WBS	Work Breakdown Structure

Note: Some definitions sourced from the PMBOK® guide and CompTIA glossary of standard project management terms.

1 Introduction

The NPS Project Management Framework within the Payment Association of Namibia (PAN) provides a set of guidelines and standards required for implementing industry-orientated projects that have an impact on the National Payment System (NPS). The framework is developed as part of the NPS vision 2020 strategic objective of promoting and managing stakeholder collaboration and cooperation with the measure that 95% *of industry projects are completed on time and on budget.* It further addresses key weaknesses and threats related to project management that were identified by NPS stakeholders during an in-depth strategic situational analysis conducted as part of the NPS vision 2020 formulation.

Given the nature of the payment ecosystem where systems belonging to different industry players require interoperability, PAN members are required to collaborate in industry or individual participant driven projects. This framework is meant to guide such collaborative projects that are approved by the PAN prioritization committee. Industry project activities may be limited to industry testing or development of specifications, standards or operation rules that enhances the payment system's interoperability.

The framework is intended to improve and sustain the following key project areas:

- Governance and committee mandates
- Project prioritisation process
- Recommendation for project funding model
- Standardised project lifecycle for small- and large-scale projects
- Quality management across the project lifecycle
- Risk and issue management
- Project integration and coordination
- Project control, management and reporting standards
- Efficiencies and predictability across project processes
- Fairness, clarity and transparency in project communication

In order to adopt international best practice, this framework is aligned to the Project Management Body of Knowledge (PMBOK® guide), a product of the Project Management Institute (PMI), a world leading organisation in project management with over 500 000 members and provides sought after certifications such as, Project Management Professional (PMP®), Program Management Professional (PgMP®), Certified Associate in Project Management (CAPM®) and PMI Agile Certified Practitioner (PMI-ACP®).

Aligning to the PMBOK® guide ensures that the project framework can easily be adopted because it uses common terminologies and that the required skills, tools and techniques needed to implement it are well proven and easily accessible.

In addition to aligning to the PMBOK®, this framework is tailored for the unique needs of the Namibian National Payment System, where consideration was given to the fact this is an industry project management framework that requires different participants to collaborate while operating in a competitive environment. Furthermore, the framework is set up in such a way that it is supportive of the existing governance structures at the Payments Association of Namibia (PAN) and the NPS industry at large. Formulation of the framework also integrated lessons and experience gained from past projects in the payment industry.

2 Project Governance, Funding and Industry Collaborations

Project governance or oversight is a mechanism put in place to act as a guide for the project manager and project team members. A well-defined project governance structure enables continuous engagement with stakeholders whose influence is critical for the success of the project and thus ensuring that the project is always aligned with the business or industry strategic objectives. It also provides guidance on escalation procedures and decision making throughout the project life cycle.

Project governance in the NPS is in line with the Payment System Management Act of 2003 (Act No. 18 of 2003) and it is supportive of underlying determinations, directives as well the PAN constitution. Projects in the NPS are influenced by a number of bodies with varying levels of governance and oversight on industry projects such as:

- Bank of Namibia as the overseer of the NPS.
- PAN Management Council (PMC)
- Bankers Association of Namibia and individual banking institutions
- PCH committees
- Prioritization Committee
- PAN Project Management Office (PMO)
- Payment System Operators
- Payments Association of Namibia

Depending on the scope and complexity of the project, there may be additional project governance structures that are to be identified and established during the Initiation stage of the project life cycle such as:

- Project Sponsor
- Project Steering Committee
- Project Manager
- Project phase gates
- Project Change Control Forum

The role of some of the governance entities and committees mentioned above are further discussed in details below.

2.1 Bank of Namibia

As per the Payment System Management Act, 2003 (Act no 18 of 2003) as amended (The Act), The Bank of Namibia (The Bank) is empowered to among others to oversee the National Payment System (NPS). As the overseer, The Bank, has interest in ensuring that the NPS industry adopts best practices that results in timely completion of projects. The Bank also issue industry directives and regulations some which may result into a project depending on most efficient manner the industry determines to comply the issued directive.

2.2 PAN Management Council

As per the PAN constitution, the PAN Management Council (PMC) acts as the governing body of PAN. PAN is Payment System Management Body (PSMB) as defined in The Act. It ensures that business and clearing rules are documented, instituted, authorised and adhered to in the payment industry

The PMC may initiate industry projects, and decisions regarding projects such as funding or human resources recruitment may be escalated to it from lower governance structures such as PCHs, prioritization committee and PAN executive office. The PMC is a key stakeholder to the projects and must be consulted in the case of project activities or outputs that impact industry processes, rules and regulations.

The PMC also serves as the final point of escalation for the Project Steering Committee. Any dispensations and reporting to Bank of Namibia will be approved by the PMC.

2.3 Bankers Association of Namibia and Individual Banking Institutions

Bankers Association of Namibia (BAN) and individual banking institutions are critical to the success of the project because they have influence on project funding and allocation of human resources. When necessary BAN may be included in the project governance structures as part of project sponsors. In projects where BAN is not part of project sponsors, it is critical that they are included in project stakeholder and communication management plans.

2.4 PCH Committees

Payment Clearing Houses (PCHs) are industry forums for discussing and agreeing on operational aspects of specific payment streams that they are responsible for. Based on the need such as regulatory requirements or enhancement of the payment system in order to offer new products, new industry projects can be initiated from a PCH and presented to the Prioritization Committee for prioritization. After Prioritization, the PCH can allocate a Project Sponsor, Project Steering Committee. PAN PMO will then provide administrative support to the project including appointment of the Project Manager. At project closure, the handover is to be made to the PCH as the forum for users of the final project products.

The project governance process is therefore a continual cycle which starts and ends with the relevant PCH Committee.PCH committees are not project-focused but they are direct stakeholder with interest on the outputs of industry projects. The PCH plays a key role in the project lifecycle where:

- NPS directives are formulated
- All industry projects that impact the NPS are monitored
- Final decisions on payment-related matters are made
- Risks to the NPS are monitored and controlled
- Business and industry rules are created, changed and maintained

2.5 Prioritisation Committee

The Prioritization Committee is a sub-committee of the PMC whose purpose is to manage the prioritization aspect of the industry's project portfolio management. That is, to decide on the priority and ordering of all projects that changes the NPS. The composition of Prioritization Committee is decided upon by PMC based on the committee's terms of reference as well as technical and strategic expertise requirements. PAN PMO provides administrative support to the Prioritization Committee.

The Prioritization Committee receives project submissions from different sources. Projects that are driven and usually funded by individual NPS participants are to be submitted by the individual participants themselves while industry driven projects are to be submitted by PCHs. Other entities other than individual participants and PCHs may also submit projects to the committee based on the nature, origin and motivation for the change.

In order for a project to be considered for prioritization, minimum standards must be met and adhered to as per the NPS Change Management Process and the Prioritization Committee's rules

In line with the NPS's core values of fairness, integrity and transparency, the Prioritization Committee is to define and use fair and transparent prioritization criteria to be approved by the PMC. In addition to the prioritization criteria, the committee must also consider but not necessarily be bound by the input of payment system operators as owners of central industry technical environments.

The Prioritization Committee must receive regular updates on the status of active projects as that might have a bearing on the prioritization of new projects.

At the time of this write up, the prioritization committee terms of reference and prioritization criteria was under review and will be submitted to the PMC for approval.

2.6 Payment System Operators

Payment system operators are the owners of industry central technical environments that connects different NPS participants together. Payment system operators manages the promotion of changes through the testing cycles into the live/production environment during the project execution stage. They are responsible for the maintenance of the industry test and implementation slots, as well as allocation of test environments to industry changes.

Payment system operators' input to the prioritization process is very crucial in the scheduling of testing and implementation slots for projects. They must therefore be represented on the prioritization committee.

2.7 PAN Project Management Office (PMO)

The PAN Project Management Office (PMO), in PAN executive office, is established to ensure the NPS industry achieve its' vision of ensuring that 95% percent of the industry's projects are completed on time and on budget. The PMBOK® guide defines the Project Management Office (PMO) as:

> *A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools and techniques. The responsibilities of a PMO can range from providing project management support functions to actually being responsible for the direct management of one or more projects*

The PAN PMO is among others responsible for:

- Providing administrative support to the Prioritization Committee.
- Developing and being a custodian of the NPS Project Management Framework.
- Promoting the use of the Project Management Framework in the NPS.
- Developing other project-related methodologies such as the Industry Test Methodology.
- Appointing Project Managers to industry projects.
- Ensuring the NPS implements projects using international best practices

2.8 Project Sponsor

The project sponsor is involved in the proposal and initiation of the project and must drive the development of the project charter. He/she acts as the reporting line for the project manager as well as assessing his/her performance. The project sponsor is also responsible for handling issues that are above the authority of the project manager.

The project sponsor for industry projects may be the PAN COO or any other stakeholder from the NPS whose organisation is responsible for organising project funding or is accountable for the strategic objective of the project.

2.9 Project Steering Committee

The Project Steering Committee is put in place during the Project Initiation stage of the project lifecycle. The main purpose of the committee is to govern all aspects of the project across scope, cost, schedules and quality. The steering committee must be made up of representatives from project participants and other industry stakeholders. It must be chaired by the project sponsor. The Steering Committee must be empowered to do the following:

- Act as the first point of escalation for risks and issues.
- Approve/reject changes.
- Provide direction for the project.
- Make decisions on behalf of the participants.
- Provide the necessary support to the team implementing the project.

Participating organisations must be asked to nominate members of the steering committee as soon as their participation is confirmed. Other stakeholders who are not necessarily project participants may also be asked to nominate members of the steering committee, if it is deemed that their membership will enhance the committee's ability carry out its duties.

The project steering committee is accountable, at the industry level, for the successful implementation of the project.

2.10 Project Funding

Availability of funds is one of the critical success factors for projects. It is therefore important that the source of funding is determined and documented in the project charter at the initiation stage of the project. The project management framework does not prescribe where project funding should come from, but rather provides a guideline that can be used by project steering committee, PCHs, PMC, BAN or any other body that may be tasked to decide on project funding.

The first port of call for decision making on industry project funding must be the PCH under whose domain the project falls or the project steering committee if it is established. In cases where the PCH or steering committee is unable to decide or the project does not fall under any existing PCH, the project funding decision must be escalated to the PMC. Where necessary, the PMC may ask for input from Bankers Association of Namibia (BAN). For regulatory compliance projects that are initiated the Bank of Namibia in its' role as the NPS overseer, the Bank of Namibia may recommend the source of funding as part of the directive to start the project.

After the initiation stage of the project, where the project sponsor(s) and steering committee has been appointed, project funding decisions that might come up must be handled by the project sponsor and

the project steering committee. The project steering committee may escalate project funding decisions to other bodies such as the PCH, PMC or BAN as they may deem fit.

As mentioned above, the bodies tasked with decision making of project may use the guidelines as described hereon. The two (2) main factors that determines where project funding should come from are, (1) type of project and (2) beneficiary of the project output.

Industry projects that would benefit all participants in terms of an enhanced overall payment system or compliance to a regulatory directive may be funded by all participants using a fair and transparent project funding model. A funding model can be derived by using the PAN funding model as a guide and appropriately amend it to fit the project. An example of project funding model, is the one used for the enhanced EFT project, where the industry agreed and signed off that; 50% of costs are to be shared equally among all participants in the form of a base fee, while the other 50% is shared based on volumes of transactions per participant on the existing EFT platform.

Individual participant projects that are initiated by and only benefits that particular participant may be funded by the initiator. Cost for testing at all other payment system participants are to be paid by testing participant in line with the payment system's principle for existing participants to test and sign off new entrants' test results.

2.11 Industry Collaboration

Given the nature of the NPS where systems belonging to different participants are interconnected and usually require interoperability, approved participants in the NPS must avail themselves, at their own cost, as test partners as may be required during both industry and individual participant driven projects approved by the prioritization committee. This is in line with one of the NPS core values, **collaboration**.

For participants to fully prepare for tests, a user notice for UAT must be distributed to participants three (3) months before tests begins. User notice for promotion to production must also be distributed before promotion to production and pilot sanity tests start. All participants must provide acknowledgement of receiving the user notice in writing. Exception to this approach must be agreed upon by all participants.

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3 Project Life Cycle and Processes

3.1 Project Life Cycle

The project lifecycle are stages which all projects must progress through from the commencement to the end in order to deliver the project requirements. Based on the complexity and magnitude, a project may be divided into phases if that is deemed the most effective way to reach the project's objectives. A phase is a collection of related activities that results in one of the major outcomes of the projects. The number of phases and their outcomes are depended on the nature of the project. Phases can run sequentially, in parallel or have some of their activities overlap. The project life cycle is made up of such phases. Each phase should typically be made up of tasks and activities that follow processes from the 5 **process groups** below that are defined in the PMBOK® guide:

1. Initiating
2. Planning
3. Executing
4. Monitoring and Controlling
5. Closing

For a single phased project, the process groups above usually map the stages that a project progresses through, where most of the processes in monitoring and control takes places at the same time as project execution processes.

Figure 1 below shows the life cycle of typical projects in the NPS including the main outputs at each stage.

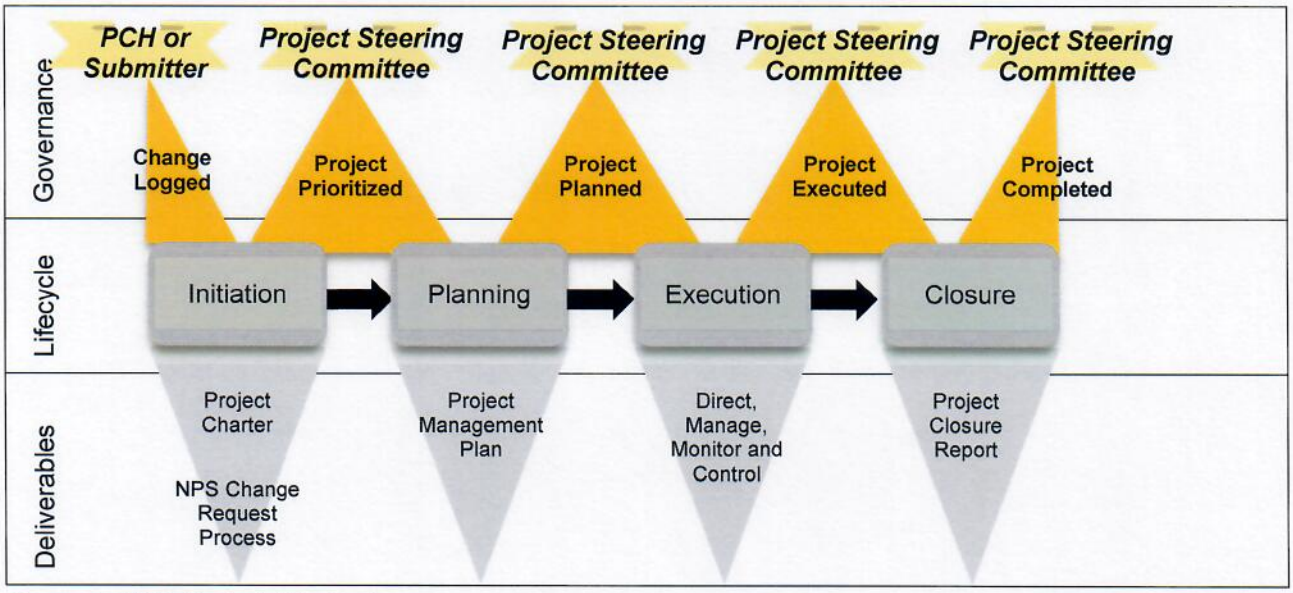


Figure 1: NPS Project Life Cycle

3.2 Project Processes

Each of the process group mentioned above is made up of project processes. The PMBOK® guide defines 47 generic project processes that may be applied to project activities in order to effectively meet the project requirements. A process is defined as "*a set of interrelated actions and activities to create*

pre-specified product, service or result". Each of the processes has well defined inputs, tools & techniques as well as outputs.

An example of a project process is **collect requirements** whose product is a **requirements document** and it falls under the planning process group.

In addition to process groups, each process is further placed into one of the ten (10) project management knowledge areas (KA). Each knowledge area is a set of processes whose knowledge forms an area of specialisation in project management. The **collect requirement** process example given above falls under **scope management** knowledge area and planning process group. The knowledge areas are:

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management
- Project Stakeholder Management

Table 1 below shows examples of the common project processes including their outputs, as well as the process groups and knowledge areas that they belong to.

Process	Outputs	Process group	Knowledge Area
Develop project charter	Project Charter	Initiating	Project Integration Management
Identify stakeholders	Stakeholder Register	Initiating	Project Stakeholder Management
Develop project management plan	Project Management Plan	Planning	Project Integration Management
Collect requirements	Requirements Document	Planning	Project Scope Management
Define Scope	Project Scope Statement	Planning	Project Scope Management
Create WBS	Scope Baseline	Planning	Project Scope Management
Develop schedule	Project Schedule	Planning	Project Time Management
Estimate costs	Activity Cost Estimates	Planning	Project Cost Management

Direct and manage project work	Work Performance Data	Executing	Project Integration Management
Acquire project team	Project Staff Assignments	Executing	Project Human Resources Management
Manage communications	Project Communications	Executing	Project Communication Plan
Perform integrated change control	Change log	Monitoring and Controlling	Project Integration Management
Control Schedule	Work Performance Information	Monitoring and Controlling	Project Time Management
Close procurements	Closed Procurements	Closing	Project Procurement Management
Close project or phase	Final Product	Closing	Project Integration Management

Table 1: Examples of project processes, their outputs, process groups and knowledge area.

For a comprehensive list of all processes, see appendix H which shows the mapping of processes into process groups and knowledge areas. Further description of each process, its inputs, tools & techniques as well as outputs can be found in the PMBOK® guide.

The project team must choose the appropriate processes and may tailor them accordingly in order to meet the project objectives.

4 Project Initiation

Project initiation is a stage where a project is proposed and its business case as well as viability assessed and approved. In the NPS, the major activities of the initiation stage are:

- Appointment of the project sponsor, steering committee and project manager
- Development and approval of the project charter
- NPS change request process including project prioritization

4.1 Appointment of Project Sponsor, Steering Committee and Project Manager

The project sponsor must be identified as soon as the project is proposed in order to drive the initiation stage. He or she would among others ensure the project steering committee and project manager is appointed.

Participating organisations must be asked to nominate members of the steering committee as soon as their participation is confirmed. Other stakeholders who are not necessarily project participants may also be asked nominate members of the steering committee, if it is deemed that their membership will enhance the committee's ability carry out its duties. The description and roles of the project sponsor and steering committee are as described in sections 2.8 and 2.9.

Based on the magnitude of the project, each participating organisation may assign its own project manager or coordinator while the PAN PMO project manager would be the programme manager to oversee the overall programme.

4.2 Project Charter

The project charter is a document that officially authorises the existence of the project. It includes high level requirements, initial budget estimate and an estimate schedule of key milestones. It further serves as a term of reference and agreement between the project sponsor and the project team and it authorizes the project manager to start allocating resources to the project

The project sponsor and/or steering committee is accountable for the project charter, but the project manager may be involved in its formulation. The project charter must be as high level and as brief as possible so that it is easily consumed at executive levels of organisations and other stakeholders.

The major inputs to the project charter are the business case and/or payment system determinations (PSD) as well as directives in case of compliance driven projects. The project charter is developed using the **develop project charter** process. It must be made up of the following sections: (See Appendix B: Project Charter Template)

1. Objective
2. High level requirements
3. Duration
4. Summary budget/Costs
5. Source of funding
6. Assumptions and Constraints
7. Dependencies
8. Project Success Criteria

9. Critical Success factors
10. Risks
11. Organisation
    a) Project Sponsor
    b) Steering Committee
    c) Project Manager
    d) Project Team,
12. Roles and responsibilities
13. Stakeholders

4.3 NPS Change Request Process

As part of the approval process, each project that impact the NPS must go through a change request process which include project prioritization. The process is put in place to ensure that:

- All industry changes are treated fairly, consistently and objectively
- There is a standardised process for projects' prioritization.

Changes are initially submitted via the relevant PCH to the PAN secretariat using a standard change request form that enables proper categorisation and clustering using pre-defined criteria. See Appendix A for the NPS change request form. The administrative function of the PAN Secretariat aligns and works together with the submitter of the change to ensure that the required documentation is submitted to the PAN PMO in preparation for the Prioritisation Committee.

The PAN PMO applies the pre-defined criteria to the change type and prepares the prioritisation committee board pack. This approach ensures that changes are treated equally and objectively through the process while keeping a distinct segregation of duties to prevent favourable or unfavourable treatment of changes. The process serves as a key input into the project lifecycle and is depicted in Figure 2 below.

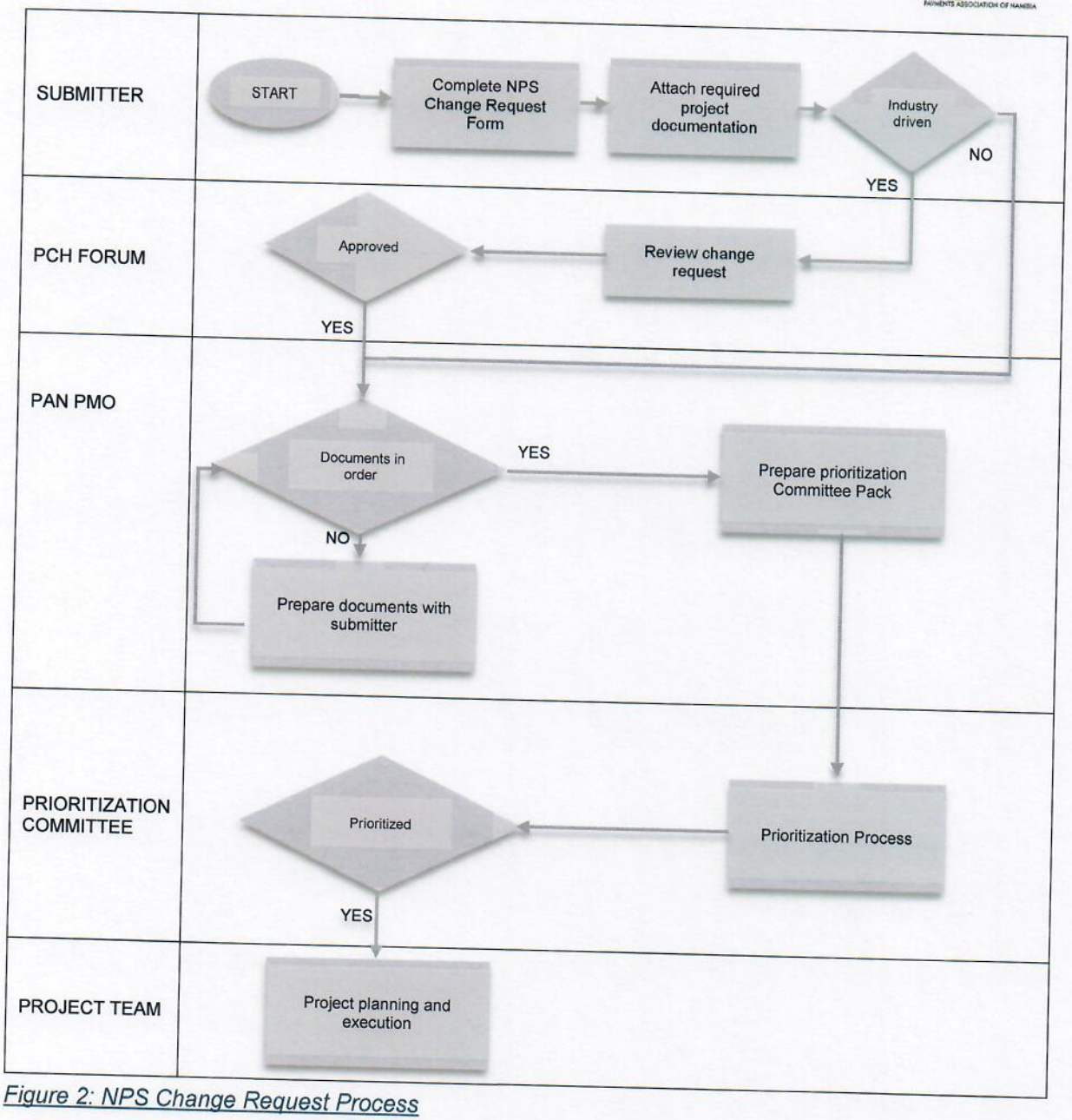


Figure 2: NPS Change Request Process

4.4 Project Stage Process Guideline

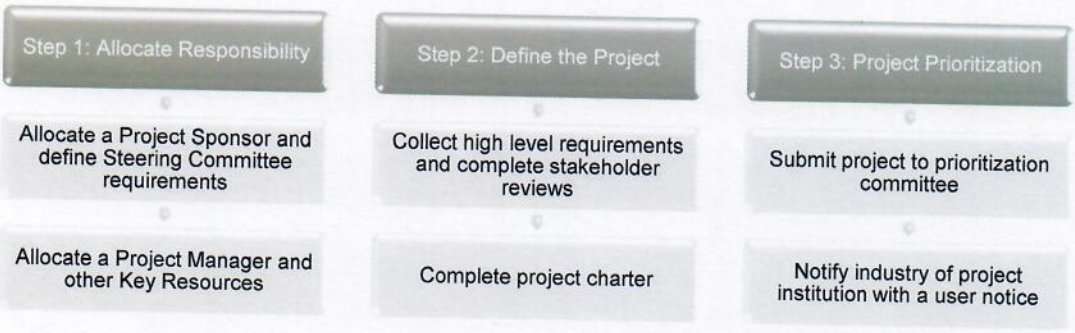


Figure 3: Initiation stage process guideline

4.5 Project Stage Deliverables

Deliverable	Description	Template/Guideline
Project Charter	Translation of the business case documentation into the purpose of the project, critical success factors, project participants, the project objectives and how to achieve them.	Appendix B: Project Charter Template
High level requirements	Collect high level requirements for the project.	Section 5.1.1
Stakeholder Analysis	Identification, grouping and analysis of project stakeholders, what information they require and how to communicate with them.	Section 5.1.8

Table 2: Initiation stage deliverables

4.6 Project Stage Gate

Measurements	Output(s)
• Steering Committee approval of deliverables • Required resources secured • Project prioritised	Approval to proceed to Planning stage

Table 3: Initiation stage gate

4.7 Project Assurance Gate

In order to ensure the adherence to defined quality standards, the following checklist should be completed:

- The Project Sponsor has been identified and appointed
- The Project has been officially launched
- The Project Steering Committee has been formally instituted
- Stakeholders have been identified
- Business requirements have been clearly articulated signed off by the Project Steering Committee

5 Project Planning

Following the successful completion of the initiation phase, the detailed planning of the project will commence. The planning stage is critical in ensuring that the project objectives are pursued within realistic timelines, resources are allocated and utilised effectively and costs are well budgeted and controlled.

5.1 Project Management Plan

The project management plan is the main project document that guides the project manager, project team and other stakeholders during the implementation of the project. The project management plan cover plans for all important project aspects such as:

- Scope
- Schedule
- Budget
- Quality management
- Human resources
- Procurement
- Risk management
- Stakeholder engagement and
- Communication plan

For industry projects, the industry project/programme plan must only include details that are necessary for tracking at the programme level. Internal budget, human resources and procurement processes for example must only be part of the organisational level project plan unless otherwise explicitly stated as a requirement at the industry level.

The project management plan document must be completed and then approved by the project steering committee or sponsor before the execution stage of the project start, that is, it must be the entry criteria for execution stage. The document must also be updated throughout the project life cycle to capture approved changes that might be encountered. The updated project plan must be approved by the appropriate authorities and document version control measures must be in place.

5.1.1 Project Scope

Scope is the description of all the outputs that should be included in the project in order to meet its objectives. It is important to include scope exclusion in order to manage stakeholder expectations.

Scope generation starts with the process of collecting requirements. The primary source of requirements is the high-level requirements that were gathered as part of the project charter. Other sources of the requirements are:

- Existing document analysis
- Benchmarking
- Facilitated workshops
- Interviews
- Questionnaires and surveys

The collected requirements must preferably be captured in a standalone **business requirement document (BRD)**.

Based on considerations such as available funds, time required to complete the project as well as technical viability, some of the collected requirements may be excluded from the scope. The scope is defined using expert judgement by resources with specialised technical knowledge in the field of the project product. The defined scope is documented in the form of a **project scope statement** which must include the following items:

- Product scope description
- Acceptance criteria
- Deliverables
- Project exclusions
- Constraints
- Assumptions

Deliverables defined in the scope statement are translated into required work packages. Work packages are decomposed into hierarchical components in what is called a **work breakdown structure** (WBS). The PMBOK® guide defines **create WBS** as *the process of subdividing project deliverables and project work into smaller, more manageable components.*

A WBS is created by using a decomposition process where the scope is divided into WBS components. WBS components are further sub-divided down to more manageable work packages which can easily be scheduled and assigned cost and human resources. Each WBS component and its sub-components are assigned an identification code for easy of tracking during subsequent processes. The highest level of the WBS can be made up of the project phases or major deliverables. The WBS is documented as part of the **scope baseline**.

Typical activities or work packages inherent in the Namibian national payment system are:

- **Analysis and Design,** where each requirement from the requirement documentations translated into the corresponding specification/s in the **functional specification document** (FSD). The FSD is then used to design the system for delivering the project product.
- **Development and Build Deployment**, where the design is implemented.
- **Tests.** Tests are divided into component integration tests (CIT), system integration tests (SIT) and user acceptance tests (UAT). The tests in the NPS must be implemented by using the approved industry testing methodology developed by the PAN PMO.
- **Pilot**. A stage in the project where systems are promoted in production (PROD) environments where controlled live data is used to do sanity tests before the product is officially handed over for operations.

Strategy and plan documents, test cases/scenarios, as well as entry and exit criteria for tests such as CIT, SIT, UAT and pilot must be developed based on the ***PAN PMO Industry Test Methodology*** and get approved by the project steering committee.

5.1.2 Project Schedule

The project schedule or flight plan is the main output of the time management plan. To arrive at the schedule the following processes must be carried out.

- Define activities
- Sequence activities

- Estimate activity resources
- Estimate activity duration
- Develop schedule

Activities are defined by identifying actions that must be performed to produce each project deliverable. As in WBS generation, this process uses the decomposition but, in this case, the final item after break down of work packages are the activities where scheduling and resource allocation can be performed. All identified activities are documented in the **activity list** including their attributes such as activity identifier, duration, cost, resource to perform it, predecessor activity etc.

Activities are sequenced by first determining their relationships in terms of predecessor or successor dependency by using the precedence diagramming method (PDM). The PDM establishes logical relationships among activities by showing in what state the predecessor activity must be for dependent activity to start or finish for example. The sequencing process results in a **project schedule network diagram**.

After estimating resources and duration for each activity, the schedule can now be developed. The schedule would show the estimated start and finish date for each activity and subsequently for the whole project. The **project schedule** is developed by entering activity sequences, durations and resources into project software such as Microsoft® Project.

On the project schedule one can determine minimum duration of the project by identifying the critical path, the sequence of activities with the longest combined duration and where the change in any activity duration affects the project's overall duration. The project schedule must also include contingency to cater for delays that might be encountered.

5.1.3 Project Budget

The project budget is the central focus of project cost management plan. The budget is determined by first estimating costs for each activity. Cost estimation can be used by using methods such as analogous estimating by using costs from similar projects. The output of this process is the activity cost estimates. The estimated costs must include project overheads and contingency.

After cost estimates per activity, the budget can be determined. The budget makes up the project funding requirement. The **cost baseline** which includes the estimated expenditure schedule over time must also be developed.

5.1.4 Project Quality Management Plan

Quality management ensures that the project output / product performs as expected. The quality management plan must be in line with specific organisations quality management policies and guidelines if there are any. The plan must identify quality requirements and/or standards that must be met for each project requirement that was captured in the requirement document as part of scope definition. It must also document how the project will demonstrate compliance with the identified quality requirements. The quality management plan must embrace the following approaches:

- Customer satisfaction
- Prevention over inspection
- Continuous improvement
- Cost of quality (COQ).

The cost of quality (COQ) approach ensures zero or minimal defects and that defects are picked up during the project execution and not in operation which would otherwise increase the product's overall cost throughout its lifecycle. To prevent a much high cost due to nonconformity to quality by re-working and possible loss of business it is better to rather spent on preventive measures in order to conform to quality by for example:

- Providing training to project resources.
- Establishing a robust project document management process.
- Budget for more time to do it right.
- Invest in quality equipment and tools.

Apart from the identified quality requirements, the quality management plan must also include quality metrics and checklists.

5.1.5 Project Human Resources Management Plan

The project human resource management plan identifies roles, responsibilities and required skills for each activity as per the activity resource attribute of the activity list. The human resource management plan must include the following aspects:

- Roles, responsibilities and required skills.
- Project organogram to show reporting lines.
- Project staffing plan.

Human resources' allocated activities or work packages can be shown by using tools such as resource allocation (RAM). Table 4 below shows an example of a RAM matrix in a form of a RACI chart. On a RACI chart, a team or team members' role on specified activities are indicated by assigning a letter R for responsible, A for Accountable, C for Consult or I for inform.

RACI Chart	Person				
Activity	Ann	Ben	Carlos	Dina	Ed
Create charter	A	R	I	I	I
Collect requirements	I	A	R	C	C
Submit change request	I	A	R	R	C
Develop test plan	A	C	I	I	R

R = Responsible A = Accountable C = Consult I = Inform

Table 4: A RAM matrix in a form of RACI chart (Source: PMBOK® guide)

The project staffing plan must show the timetable for staff acquisition and release. Project staff members can be from internal participant organisation or outsourced from other organisations. Availability of staff members is crucial for the success of the project, it is therefore crucial that there is assurance from the highest levels in participant organisations that staff will be availed for the project/ programme. Where

necessary, issues regarding staff availability can be escalated to bodies such as Bankers Association of Namibia (BAN).

As part of the quality management plan, project human resources training needs must be identified, budgeted and scheduled at suitable times.

5.1.6 Project Procurement Management Plan

Project procurement management plan is part of the project plan that outlines how the project would acquire project goods and services from outside participant organisations. The project procurement plan must be in line with individual organisations' procurement policies and guidelines. As mentioned above, only procurement processes that are necessary for tracking at the industry level must be included in the industry project plan.

The procurement plan must include work or products that must be procured from outside the organisation. A statement of work that includes the following items must be prepared for all deliverables:

- Specifications
- Quality
- Quantity
- Other requirements

The procurement management plan must also include procurement related activities and their schedules such as:

- Preparation of statement of work and specifications
- Invitation of bids
- Selection of suppliers
- Contract negotiations and sign off.
- Delivery

As part of the procurement management plan, the project team must also determine, whether suppliers will be paid on time basis or achieved milestones.

5.1.7 Project Risk Management Plan

The PMBOK® guide defines project risk as *an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives such as scope, schedule, cost and quality.*

The **risk management plan** component of the project management plan is where the project's approach to risk management is defined. It must include the following aspects of risk management:

- Methodology
- Roles and responsibility
- Timing
- Definition of risk probability and impact
- Probability and impact matrix

- Reporting format

The definition of risk impact is critical to risk management because together with risk probability they are used to quantify the magnitude of risks and prioritise them accordingly. Definition of impacts must be tailored to each project but must consider impact on scope, schedule, cost and quality. Table 5 below shows an example of a definition of impact scales.

Defined Conditions for Impact Scales of a Risk on Major Project Objectives (Examples are shown for negative impacts only)					
	Relative or numerical scales are shown				
Project Objective	Very low /0.05	Low /0.10	Moderate /0.20	High /0.40	Very high /0.80
Cost	Insignificant cost increase	< 10% cost increase	10 – 20% cost increase	20 – 40% cost increase	> 40% cost increase
Time	Insignificant time increase	< 5% time increase	5 – 10% time increase	10 – 20% time increase	> 20% time increase
Scope	Scope decrease barely noticeable	Minor areas of scope affected	Major areas of scope affected	Scope reduction unacceptable to sponsor	Project end item is effectively useless
Quality	Quality degradation barely noticeable	Only very demanding applications are affected	Quality reduction requires sponsor approval	Quality reduction unacceptable to sponsor	Project end item is effectively useless
This table presents examples of risk impact definitions for four different project objectives. They should be tailored in the Risk Management Planning process to the individual project and to the organization's risk thresholds. Impact definitions can be developed for opportunities in a similar way.					

Table 5: Example of risk impact definition (Source: PMBOK® guide)

Apart from risk management plan, the other important document related project risk management is the **risk register**. The risk register documents the identified risks and their attributes such as:

- Risk Id
- Risk statement describing what event may occur and what impact it would have.
- Identified, updated and closed dates
- Logged by
- Probability
- Impact
- Risk factor (combination of impact and probability)
- Risk rating (low, moderate or high as per the probability and impact matrix)
- Response
- Risk owner
- Open/closed status
- Risk/issue status

Risks are identified by using the **identify risk** process using techniques such as document analysis, information gathering techniques, project assumptions analysis and SWOT analysis.

Risk attributes such as probability, impact, risk factor and risk rating are populated after doing a **perform qualitative risk analysis** process where the major tools and techniques are the probability and impact

assessment for generating each risk's probability and impact as well as the probability and impact matrix for calculating the risk factor and risk rating allocation.

The response attribute is populated after carrying out the **plan risk responses** process. This is a process by which a plan is put in place to reduce the probability and impact of each risk. Based on the rating of the risk, one of the following responses can be chosen:

- Avoid
- Transfer
- Mitigate
- Accept

For positive risks or opportunities, the risk response is put up to increase the possibility of the identified opportunity. One of the following risk responses can be chosen:

- Exploit
- Enhance
- Share
- Accept

The risk register must be updated throughout the project lifecycle during regular scheduled sessions to do risk assessment. When a negative risk has occurred, it must be reclassified to an issue.

5.1.8 Stakeholder Management Plan

Stakeholder management includes the processes of identifying, managing and engaging stakeholders. Stakeholders are people, groups and organisations with interest on the project because they might be affected by the project activities or outcome, or those that have influence on the success of project. Such influence can be negative or positive. The information about stakeholders with negative influence on the project must be handled carefully as they may be sensitive and may render their identification counterproductive if the information falls in the wrong hands

The process of identifying stakeholders starts at the initiation of the project and identified stakeholders are included in the project charter. The main outcome of the **identify stakeholders** process is the stakeholder register. The register must contain the following information:

- Name
- Contact information
- Role in the project
- Interests
- Expectations
- Classification

Roles, interests, expectations and classification of stakeholders is derived from stakeholder analysis. Information from the stakeholder register can be used to develop a **stakeholder management plan** that details how identified stakeholder's expectations will be managed and engaged as well as how positive influence of supportive stakeholders will be enhanced. The plan must also refer to the project communication plan which shows the communication strategy for each stakeholder based on their needs and expectations.

5.1.9 Project Communication Plan

The **project communication plan** details how project information will be created, collected, stored and distributed. Most importantly it must show what and to whom the information will be distributed to based their communication needs. Communication needs are formulated by doing communication requirement analysis for each stakeholder in the stakeholder register. The project communication plan must contain the following information in a form of a table.

- Stakeholders
- Communication requirements
- Distribution frequency and timing
- Person responsible for distributing information
- Person/body responsible for authorising information distribution
- Communication methods (E-mail, memo, letter, project report, meeting, conference call, press release

Communication ensures that stakeholders are always well informed about the status of the project which determines what is expected of them at all times to contribute to the success of the project. Given how critical communication is to the success of the project, communication related activities must be scheduled and be budgeted for.

5.2 Project Stage Process Guideline

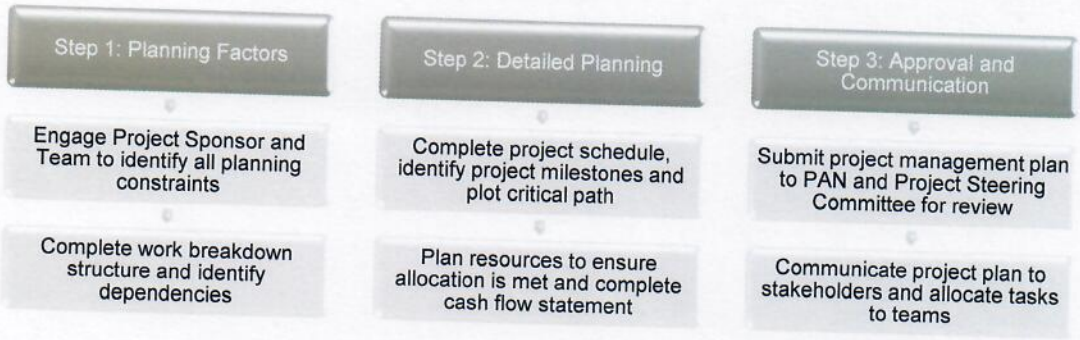


Figure 4: Planning stage process guideline

5.3 Project Stage Deliverables

Deliverable	Description	Template/Guideline
Project Management Plan (PMP)	Consolidation of all project planning process outcomes across scope, time, cost and quality.	Section 5.1 and Appendix C: Sample Project Plan
Business Requirement Definition (BRD)	Specify the set of required conditions or capabilities that must be present in the solution to meet the objectives of the business case.	Section 5.1.1
Work Breakdown Structure (WBS)	Subdivision of project deliverables and scope into smaller and more manageable work packages	Section 5.1.1

Project Schedule	Definition and preparation of the logical sequence of delivery of work packages and tasks.	Section 5.1.2
Communication Plan	Detailed plan with communication methods, stakeholders and communication frequencies	Section 5.1.9
Human Resource Management Plan	Outline of how to supply and manage the skilled workforce and/or infrastructure as derived from contracts and project plans. This needs to ensure that resources are not over- or under-loaded and that there is a process in place to allocate, review and manage tasks.	Section 5.1.5

Table 6: Planning stage deliverables

5.4 Project Stage Gate

Measurements	Output(s)
• Steering Committee approval of deliverables • PAN approval of project management plan • Project plan is communicated to stakeholders	Approval to proceed to Execution stage

Table 7: Planning stage gate

5.5 Project Assurance Gate

In order to ensure the adherence to defined quality standards, the following checklist should be completed:

- All deliverables and the activity required to complete it have been identified
- Deliverables have been logically grouped into manageable sized work packages
- Work packages are logically sequenced and organised in top-down approach
- Work packages, tasks and activities are numbered uniquely
- Sub-tasks in work packages are accurately and adequately structured
- Project delivery/execution approach is decided
- The project plan logically flows with tasks/activities ending with milestones
- Task and milestone dependencies are identified and clearly defined
- Milestones are identified across project stages/phases
- Milestones are not plotted too far from each other and are regular (at least 1 per month)
- Task/activity naming convention that makes sense when read in isolation
- No dependencies or responsibilities allocated to Summary Tasks
- Budget and cash flow statements are available and reflective in the project plan
- All tasks/activities have been allocated to resource(s)
- Resources are not over- or under-loaded
- Provision is made for public/resource holidays and non-working-days
- Project stage gates and quality assurance gates have been factored into the plan
- Planning risks have been identified and mitigations are provided
- Project plan reflects requirements provided in the communication plan
- Trade-offs have been identified and resolved with key decision points identified
- The Project Management Plan (PMP) is approved by the Steering Committee
- The PMP is loaded onto required systems

6 Execution, Monitoring and Control

After all the deliverables for the project planning stage have been met and the project management plan approved, the project execution stage can start. Monitoring and control of the project also takes place at the same time as the project execution. During this stage, the project manager and project team members are guided by the approved project management plan to direct, manage, monitor and control project work.

6.1 Direct, Manage, Monitor and Control Project Work

Direct and manage project work is the process of doing the actual work, that is, carrying out project activities in line with the approved schedule, scope, quality and budget. For typical NPS technical projects, this is the stage where following is carried out:

- Detailed analysis and design
- Development
- Build deployments
- Testing
- Promotion to production environments including the pilot phase also known as **go live**.

Testing which is done to ensure interoperability of different NPS participants technical environments, takes up the bulk of work done at the industry level. The tests must be done according to approved test strategy and plan documents that were developed in line with ***PAN PMO Industry Test Methodology***

Monitoring and control is the process of tracking project work to ensure that it meets the project's objectives and make the appropriate adjustments. The monitoring is informed by the gathered work performance data such as:

- Work completed
- Start and finish dates of performed work
- Actual duration
- Technical performance measures
- Number of defects
- Number of change requests
- Actual costs, etc

The project management plan must continually be reviewed so that issues, risks, scope changes and key decisions are captured and brought to the attention of the project steering committee and other appropriate stakeholders timeously and accurately.

Direct, manage, monitor and control must be applied to all aspects of the project by carrying out the following project management processes.

- Acquire, develop and manage project team
- Conduct procurements
- Control scope, schedule and costs
- Perform quality assurance and control quality
- Perform integrated change control process
- Manage and control stakeholder engagement

- Manage and control communication
- Control risks

6.1.1 Acquire, Develop and Manage Project Team

Project team members are acquired and confirmed to positions on the project based on the project human resource plan. The selection process must consider the following criteria:

- Candidate's experience, skills and ability in line with task's requirements
- Candidate's cost compared to project budget if necessary
- Candidate's availability throughout the assigned activity duration

Project team members can be assigned from inside the implementing organisation, other projects or as consultants from external organisations. The acquisition of team members requires the project management team to effectively engage functional managers of the targeted team members.

Ideally, a project kick-off meeting must be held between the project manager and key project team members to go through the project management plan in order to ensure that each project team member's roles and responsibilities as well as planned delivery dates are clear.

Develop project team is the use of deliberate measures to improve team members performance on the project. This process requires the project manager to apply leadership and interpersonal skills for motivating and inspiring team members as well as enhancement of team work. Deliberate measures for team development may include team building activities and training. Apart from off-site professionally supervised activities, team building can also be built into project activities such as team meetings held face to face or collocating team members in one working space for example.

In order for project team members to effectively and efficiently execute on their assigned tasks, training must be conducted based on the team members identified training needs and as scheduled in the project management plan. Training can also be used as a tool for risk mitigation and quality management.

Manage team members is a process of assessing team members performance when they are executing on assigned tasks. It includes the provision of required support to the team members on issues that may arise. Team management requires regular communication with team members in order to gather performance data, communicate new instructions and contact project performance appraisals.

6.1.2 Conduct and Control Procurements

Procurement is conducted based on the project procurement plan which must be in line with the organisation's procurement policy. This process includes the selection of suppliers and the awarding of contracts. Contracts or other forms of agreement between the buying and selling entities must clearly stipulate the products or services that must be delivered, including timelines and payment terms. Product specification can be described in the contract's statement of work section or by referencing other documents such as functional specification document (FSD) or business requirement document (BRD)which must then be an annexure to the contract.

The control procurement process ensures that the quality of work or goods delivered are as per the contract. It also handles any changes that may be required as the project progresses. The timing of

delivery must be controlled to make sure it is in sync with other project activities with which it has successor or predecessor dependencies as per the project schedule network diagram.

Other activities to perform as part of controlling procurements are:

- Gathering of procurement performance data
- Contract performance review
- Payments for performed work or delivered goods based on payment terms in the contract

6.1.3 Control Scope, Schedule and Costs

Controlling scope, schedule and costs are the core focus of project management during the execution stage. Any change to one of them has a potential impact on the other two (2).

Control scope is continuously monitoring the state of the project scope throughout the execution phase. The monitoring ensures that the project is delivering in line with the approved scope baseline and if changes to the scope are required, a formal change control process is followed. Controlling scope prevents or minimizes project scope creeps, which are the unapproved changes to the scope without considering its impact on the cost, schedule, quality and other project aspects.

Control schedule is the monitoring of the project's work progress against the approved project schedule and assess whether there is variance. Variance between the actual work progress and the planned schedule need to be acted upon accordingly by among others updating the project schedule baseline. Such a change to the schedule baseline must follow the formal change control process.

If necessary, in depth schedule performance reviews might be contacted by using methods such as trend analysis, critical path method or earned value management.

Control cost is the process of monitoring the project's progress and the cost baseline especially the estimated expenditure schedule. This process monitors the changes in schedule and scope and the impact it would have on the budget. If any change prompts the revision of the budget, such a change in budget must be approved through the formal change control process.

The monitoring of expenditure over time must also consider the quality of work done over the period under review and determine whether the expenditure delivered the value expected from such an expenditure. The **earned value management** (EVM) method which combines scope and schedule measurements might be used to determine the project's performance in terms of the delivered value against the planned value for the budget that has been utilised at that point. Such a method might also be used to forecast the actual total budget of the project based on project performance.

6.1.4 Perform Quality Assurance and Control Quality

Quality assurance is performed by auditing project requirements and carrying out measurements to ensure that the appropriate quality standards are used in order to improve quality management processes.

Quality control is performed by implementing quality management plan. It includes the execution of activities that demonstrates that the project's output meets the identified quality requirements and standards. Such activities may include tests that are performed to determine whether the product is performing as expected.

In the NPS, such tests can be in the form of system integration tests (SIT), user acceptance tests (UAT) and sanity tests in the production environment. Such tests must be carried out in line with the ***PAN PMO Industry Test Methodology.***

Quality control activities captures the quality control measurements and behaviours and then compare them to the project requirements. Defects that are picked up during this process must be documented on the project defect log. The defect log must include the following information:

- Defect id
- Defect description
- Date
- Planned resolution date
- Responsible person
- Related change request
- Severity
- Any other relevant attribute

If a defect resolution requires a change request, the project integrated change control process must be followed. Required project changes might include training for project team members and the review of relevant project processes that would result in delivery of quality work the first time because rework to improve quality usually results in project delays.

6.1.5 Perform Integrated Change Control

Based on the magnitude of the project, a change control forum must be set up to deliberate and recommend approval or rejection of submitted change requests. For industry projects, the change control forum must be made up of representatives from all participating organisations and it must convene regularly as scheduled. The project steering committee or project sponsor must approve or reject the change requests.

Changes to the project scope, schedule or budget must follow a defined project change control process, where change requests are formally submitted and logged. A project must have a change request form that must be filled in for every proposed change. (See Appendix D: Sample Project Change Request Form). The change request form must capture the following information:

- Project name
- Change request id
- Date submitted
- Change requester
- Description of requested change
- Reason for change
- Whether the change has an impact on the cost
- Whether the change has an impact on the scope
- Whether the change has an impact on the schedule
- Whether the change introduces new risks
- Priority of change
- Source of funding for the change

- Approval or rejection sign off by the project manager, project sponsor and project steering committee.

All submitted change requests whether approved or rejected must be logged on the project change request log.

Once the change is approved, the project manager must ensure that the project management plan and all other impacted project documents are updated and the change is communicated to all the relevant stakeholders.

6.1.6 Manage and Control Stakeholder Engagements

Managing stakeholder engagements is about implementing the stakeholder management plan to ensure continued support of the project from stakeholders. It involves the following activities.

- Engaging stakeholders at appropriate stages of the project
- Managing stakeholder expectations
- Addressing potential concerns
- Clarifying and resolving issues that have been identified

Changes, new risks and risks that have changed into issues must be communicated to the appropriate stakeholders using the most suitable and effective communication methods. The main responsibility of stakeholder engagement falls under the project manager but it may also involve the project sponsor based on the nature of the engagement and stakeholders. Apart from the stakeholder management plan, this process also taps from the communication management plan.

Control stakeholder engagement is the process of constantly monitoring the effectiveness of the engagement plan being implemented and make the appropriate adjustments as might be required. During this process, stakeholder management plan may be updated to reflect adjustments to the plan such as new communication methods, frequency, newly identified stakeholders and their communication needs.

6.1.7 Manage and Control Communications

During the project execution, the project manager will spend most of the time engaging in communication with both internal and external stakeholders. The purpose of communication varies from gathering information, negotiations and distributing information. This activity must be carried out in line with the communication management plan. The project manager must ensure that communication activities are scheduled as per the required frequencies.

The communication methods, such as project reports, meetings, emails, letters, telephone calls etc, must be carried out in effective manners by using best practice.

The project manager must schedule regular meetings with project team members and the steering committee and must have regular one on one meetings with the project sponsor for updates on the project status and escalation of issues when necessary. Meetings must have agenda and meeting pack which must be communicated to meeting attendants in advance. Minutes with decisions and action items must be captured and distributed within a reasonable time.

Regular project reports with latest information on the project progress must be distributed to the pre-identified stakeholders as per the planned frequencies, such as weekly, monthly, quarterly, etc. Project progress reports must have the following information.

- Status of the scope. (changes to the scope, activities done and activities still to be done)
- Status of the schedule and project flight-plan
- Status of the budget
- Status of risks
- Defects
- Issues
- Risks
- Change requests
- Any other relevant information

The project manager and team members must ensure that adhoc communications that are not necessarily planned are also attended to. These might be prompted by project issues that need escalations or request for information from stakeholders.

Changes to the project must be communicated to the relevant stakeholders in a timely manner. Such communications can include of the change request submitted or the project documents that has been revised due to the change.

Control communications is the process of monitoring the effectiveness of the project communications and make the necessary adjustment to the plan. This process assesses whether communication methods being utilised and their frequency are contributing to achieving the project's objectives.

6.1.8 Control Risks

Control risks is the process of doing risk assessment based on the risk management plan as per the schedule for risk assessment sessions. During such sessions each risk is re-evaluated and decisions on risk responses are made. If the risk response results in the change to the scope, budget or schedule, a change request process must be followed.

New risks identified throughout the project life cycle must be added to the risk register. Highly impactful changes to any risk rating must be acted on with immediate effect.

Risks are captured on the risk register as defined in the risk management plan where the following attributes must be included.

- Risk Id
- Risk statement describing what event may occur and what impact it would have.
- Identified, updated and closed dates
- Logged by
- Probability
- Impact
- Risk factor (combination of impact and probability)
- Risk rating (low, moderate or high as per the probability and impact matrix)
- Response
- Risk owner
- Open/closed status
- Risk/issue status

6.2 Project Stage Process Guideline

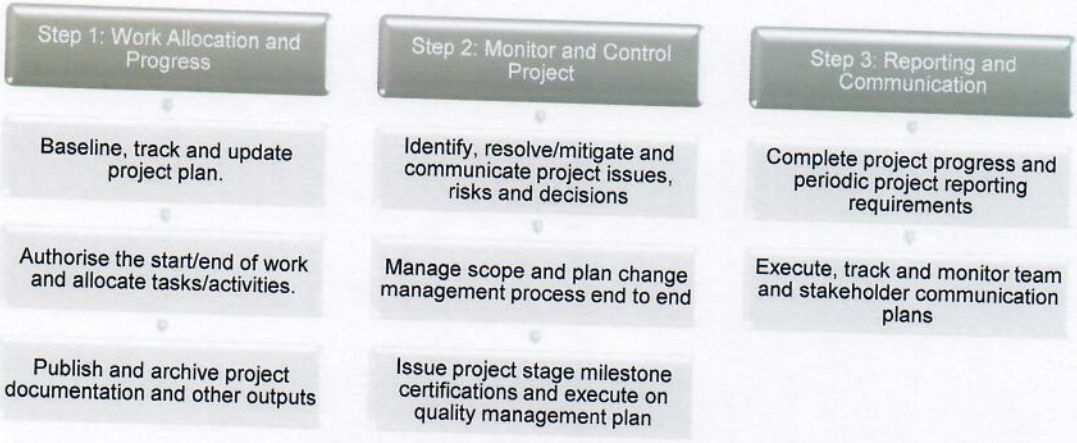


Figure 5: Execution stage process guideline

6.3 Project Stage Deliverables

Deliverable	Description	Template/guideline
Manage Project Progress	Includes the tracking and monitoring of the project management plan, allocation of work and management of issues, risks, decisions and changes. Project control registers and templates must be made available.	Section 6.1
Design, Development, Test and Training Documentation	All documentation related to the execution phases defined in the Project Charter which includes (not limited to) build release notes, product specifications, test plans, test scenarios, training plans and training materials.	Section 6.1
Procurement and Contracts	Complete required procurement or tender processes which may include RFP's, contracts, employment agreements, etc. Institute and formalise contract administration processes.	Section 6.1.2
Project Progress Report	Weekly, monthly and other periodic reporting requirements against the project management plan and current status. Other reports may be required based on stakeholder and governance needs.	Section 6.1.7
Stage Milestone Certificates	Certificates issued by the project manager to signal the closure of phases in the execution stage.	Appendix E: Project Gate/Phase Completion Milestone Certificate

Table 8: Execution stage deliverables

6.4 Project Stage Gate

Measurements	Output(s)
• Steering Committee approval of milestone deliverables • Project schedule updated weekly • Project progress reported and communicated • Governance reporting requirements met • All change requests have been approved/rejected • Approved change requests have been factored into planning and delivered • Identified issues have been managed and updated on project registers • Identified risks have been mitigated and updated on project registers • All decisions have been responded to with required actions completed • Costs have been tracked and cash flow statement updated • Communication plans have been executed • Project scope has been implemented/deployed • Support process is operational	Approval to proceed to Closure stage

Table 9: Execution stage gate

6.5 Project Assurance Gate

In order to ensure the adherence to defined quality standards, the following checklist should be completed:

- Milestone certificates have been issued, approved and uploaded into document repository
- The Project Schedule is updated regularly and baselined accordingly
- Project progress is reported clearly, accurately and timeously
- Change requests have followed the correct process
- No outstanding change requests that have not been responded to
- All issues have been closed, planned for closure or transferred
- All risks have been closed, mitigated or transferred
- Project budget has been tracked with actuals and traceable to cash flow statement
- Project deployment readiness criteria have been met
- Project was implemented/deployed by following the correct process
- Support processes have been defined and communicated before implementation
- Support processes have been followed with the correct procedures in place

7 Project Closure

A project will be closed based on the satisfaction of the criteria outlined in the project plan. In order for a project to be fully closed, the project objectives must be met, project stage gates must all have been completed and quality criteria met. Closure should also involve a formal handover process, resources should be released, contracts terminated, documents archived and project office closure. The project manager is responsible for the closure process in consultation with the appropriate stakeholders and approval of the Project Steering Committee. The role of the Project Sponsor and Steering Committee should also be completed and closed out

7.1 Close Project or Phase Process

The formal close project or phase process must include the following aspects:

- Close procurements
- Exit criteria
- Handover to operations
- Collect project records
- Stakeholder assessment
- Gather lessons learned
- Archive project information
- Project closure report

Close Procurements is a formal process of ending the contracts and agreements that have been entered into for the purpose of satisfying project objectives by sourcing goods or services from outside the organisation. Procurement closures must be done in line with procurement management plan and the organisation's procurement policy. The key aspects of closing procurement are ensuring that the agreed products or services are all delivered as per specifications and finalization of payments.

Exit criteria for each phase or entire project must be met and signed off by the relevant stakeholders such as the project sponsor or steering committee. The exit criteria must include the indication that the key deliverables of the phase or project are met.

Based on the nature and magnitude of the project, a formal handover process to operations must be carried out. This is especially important if operations staff members are different from those who were involved in the project execution. The handover process may include training.

All project records must be collected and archived for future records. In addition to archiving the project records, a **project closure report** which serves as a summary of activities and issues encountered throughout the project life cycle must be compiled. (See Appendix G: Project Closure Report Template). The project closure report must include the following items.

- Status of success criteria
- Planned vs actual results for scope, schedule and budget
- Human resources
- Quality
- Communication and stakeholder engagements
- Risks and issues
- Procurements
- Outstanding items requiring attention
- Stakeholder assessment

- Lessons learned

7.2 Project Stage Process Guideline

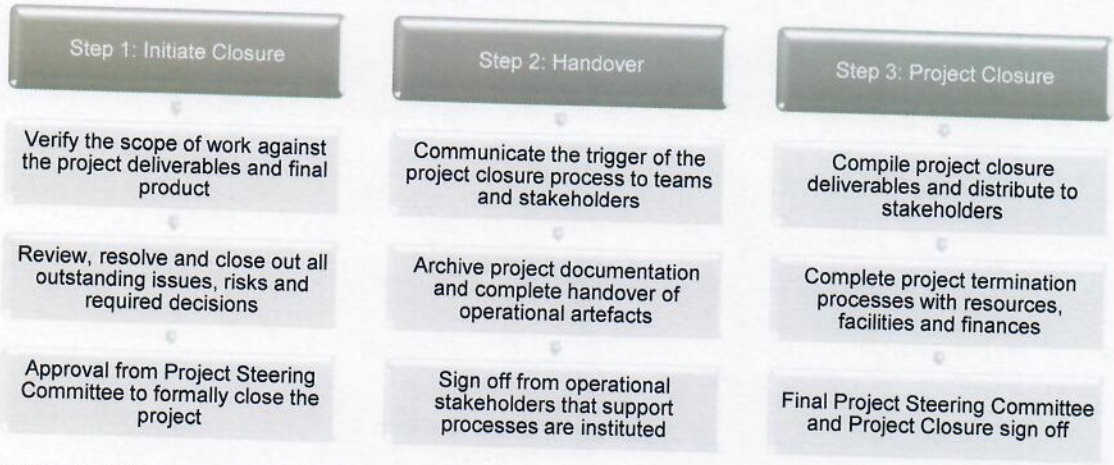


Figure 6: Closure stage process guideline

7.3 Project Stage Deliverables

Deliverable	Description	Template/guideline
Project Closure Report	Confirmation that the project has achieved all of its objectives, scope has been delivered and criteria have been met.	Appendix G: Project Closure Report Template
Lessons Learned	Description of what went right, what went wrong and what should be applied to other similar projects.	Appendix G: Project Closure Report Template
Stakeholder Assessment	Questionnaire to project stakeholders and teams to assess the overall project based on pre-defined criteria	Appendix G: Project Closure Report Template
Status of success criteria	Assessment and measurement of the planned benefit of the project against that which the project delivered	Appendix G: Project Closure Report Template

Table 10: Closure stage deliverables

7.4 Project Stage Gate

Measurements	Output(s)
• Traceability of scope of work to project outputs • Closure of project risk, issue, decision and change control registers • Steering Committee approval for project to be closed • All project documentation archived	Approval to close the project

• All operational documentation handed over • Steering Committee and Operations Committee sign off of handover process • Project Steering Committee sign off of deliverables • PAN sign off of deliverables • Contracts and agreements terminated or handed over • Project team disbanded	

Table 11: Closure stage gate

7.5 Project Assurance Gate

In order to ensure the adherence to defined quality standards, the following checklist should be completed:

- The correct closure process was followed
- Handover documentation has been accepted by operational teams
- All project documentation archived in a logical manner
- All project contracts have been terminated following the correct process
- Project closure deliverables have been signed off by Project Steering Committee
- Lessons learned process has included stakeholders and teams
- Stakeholder Assessment questionnaire covers all aspects of the projects
- Benefits are evaluated against original criteria in Project Charter
- Unrealised benefits have been handed over to operational teams with plan and tracker put in place

8 Application of the NPS Project Management Framework

Given the unique nature of industry-related projects, the project management framework is scalable and adjustable to the various categories and types of projects. These categories are derived from the type of project, the structure of PAN as well as the payment service(s) impacted by the change. All of this information is required as part of the change request process.

The project management framework is therefore split between a full adoption of the model, where all stages and steps are required, and a moderate adoption of the model, where only specific stages, deliverables and steps are required. The decision to apply the full adoption or moderate adoption to the change should be determined based on the criteria provided by the PCH for that particular change, given that this forum is constituted of subject matter experts across the industry. The below table provides the difference between the full and moderate adoption of the framework:

Stage	Deliverable	Full Adoption	Moderate Adoption
Initiation Stage	Project Charter	Required	Required
	Stakeholder Analysis and Communication Plan	Required	Not Required
	Business Requirement Definition (BRD)	Required	Required
	Resource Requirements	Required	Not Required
	Procurement and Contracts	Required	Required
Planning Stage	Work Breakdown Structure (WBS)	Required	Not Required
	Project Schedule	Required	Required
	Project Management Plan (PMP)	Required	Required
	Resource Management Plan	Required	Not Required
Execution Stage	Manage Project Progress	Required	Required
	Design, Development, Test and Training Documentation	Required	Required
	Project Progress Report	Required	Required
	Stage Milestone Certificates	Required	Required
Closure Stage	Project Closure Report	Required	Required
	Lessons Learned	Required	Required
	Stakeholder Assessment	Required	Required
	Status of Success Criteria	Required	Required

Table 12: NPS project management framework adoption levels

Appendix A: Pan Change Request Form

CHANGE REQUEST FORM

CHANGE LOG INFORMATION				
Company Name		**Request Date**		
Division/Department		**Telephone No.**		
Contact Name		**E-mail**		
Originator of Change	☐ EFT	☐ Cheque	☐ Card	☐ Immediate Settlement
Change Category	☐New Change	☐Add to Existing	☐Change to Existing	☐Maintenance
Nature of Change	☐Technology	☐Processes	☐People / HR	☐Rules/Principles
Change Type	☐ Change required on initiator only		☐ Change required on initiator and other participant/s	
	☐ Change required on other participant/s			
Request Details (describe changes required as clearly as possible)				

CHANGE REQUEST ASSESSMENT				
Summary of Impact on Initiator	☐High	☐Medium	☐Low	☐None
Summary of Impact on Industry	☐High	☐Medium	☐Low	☐None
Business Case Driver	☐Reduce Cost	☐Prevent Cost	☐Improve Revenue	☐Protect Revenue
	☐Meet Regulation	☐Manage Risk	☐Mitigate Risk	☐Feasibility Study
Expected Duration	☐0 – 3 months	☐3-6 months	☐6-12 months	☐>12 months
Funding	☐Initiator Only	☐Other participants	☐Shared Model	☐Financing required
Availability of Information	☐Business Requirement Document	☐Business Case	☐Financial Proposal	☐Project Charter
		☐Project Plan	☐Specifications	☐Resource Plan
Authorized Signatory and Company Stamp (for and on behalf of)				

Appendix B: Project Charter Template

Organization / Company
logo

Project Charter

Project Name

Date

Documentation Information	
Document Name	
Document Version	
Document Author	
Status	

Document Version History			
Version	**Author**	**Date**	**Comment**

Table of Content

Put table of content here

1. Objective

Brief description of the projects objectives

2. High level requirements and specifications

What the project's high-level requirements and specifications
What is the scope
What is excluded from the scope.

3. Duration

How long the project will take
Estimated start time of the project
Estimated end time of the project

4. Milestones

Key milestones in the project and when they are expected to be achieved.

5. Summary budget/Costs

(Cost may be removed when the document is distributed to external parties and budget is confidential)

State how much the project will cost including a high-level breakdown of costs

6. Project funding source

Indicate which entity or entities are responsible for funding the project. Where necessary, specify source of funding for different project activities.

7. Assumptions and Constraints

The major assumptions used in determining durations, specifications, costs and other matters of the project.

Constraints or known limitations outside the control of the project team that need to be managed.

8. Dependencies

Other projects or activities outside the project scope on which it depends for success or progress.

9. Project Success Criteria

Output, products or other criteria that when met determines whether the project has been successful including to certify that the project has been successful.

10. Critical Success factors

Critical factors that will help in the successful implementation of the project. What will be done to ensure that such critical success factors are in place.

11. Risks

Conditions or events that will cause problems to the project if they happen. On a scale of 1 to 10, what is the likelihood of such events taking place, what impact would they have on the project and what are the mitigating measures to minimize damage to the project.

12. Organisation

12.1 Project Sponsor

Name of the project sponsor

12.2 Steering committee members

List of the project steering committee members

12.3 Project manager

Name of the Project Manager

12.4 Project team members

Names of the project team members and their roles.

13. Stakeholders

Other stakeholders with the interest on the project. They may be affected by the project activities or outcome, or they have influence on the success of the project.

14. Roles and responsibilities

Roles and responsibilities of the project stakeholder

15. Signatures

_____ _____

Signature Date

Name

Project Sponsor

_____ _____

Signature Date

Name

Steering Committee Member

_____ _____

Signature Date

Name

Steering Committee Member

_____ _____

Signature Date

Name

Steering Committee Member

_____ _____

Signature Date

Name

Steering Committee Member

_____ _____

Signature Date

Name

Project Manager

Appendix C: Sample Project Plan

Organization / Company
logo

Project Plan

Project Name

Date

Documentation Information	
Document Name	
Document Version	
Document Author	
Status	

Document Version History			
Version	**Author**	**Date**	**Comment**

Table of Content

Put table of content here

Project budget as described in section 5.1.3

5. **Project Quality Management Plan**
   Project quality management plan as described in section 5.1.4

6. **Project Human Resources Management Plan**
   Project human resources management plan as described in section 5.1.5

7. **Project Procurement Plan**
   Project procurement plan as described in section 5.1.6

8. **Project Risk Management Plan**
   Project risk management plan as described in section 5.1.7

9. **Stakeholder Management Plan**
   Project stakeholder management plan as described in section 5.1.8

10. **Project Communication Plan**
    Project communication management plan as described in section 5.1.9

11. **Signatures**

_____ _____

Signature Date
Name
Project Manager

_____ _____

Signature Date
Name
Project Sponsor

_____ _____

Signature Date
Name
Steering Committee Member

_____ _____

Signature Date

Name
Steering Committee Member

Signature
Name
Steering Committee Member

Date

Signature
Name
Steering Committee Member

Date

PAN
PAYMENTS ASSOCIATION OF NAMIBIA

Appendix D: Sample Project Change Request Form

CHANGE REQUEST FORM

Project name

CHANGE LOG INFORMATION				
Company Name		**Request Date**		
Division/Department		**Telephone No.**		
Contact Name		**E-mail**		
Work-Stream	☐	☐	☐	☐
Change Type	☐ Scope	☐ Time	☐ Cost	☐ Other
If Other, provided brief description				
Change Required By (Date)				
Change Request Details (describe changes required as clearly as possible)				

CHANGE REQUEST ASSESSMENT				
Summary of Impact on Initiator	☐ High	☐ Medium	☐ Low	☐ None
Summary of Impact on Programme	☐ High	☐ Medium	☐ Low	☐ None
Reason for Change	☐ Reduce Cost	☐ Prevent Cost	☐ Improve Revenue	☐ Protect Revenue
	☐ Meet Regulation	☐ Manage Risk	☐ Mitigate Risk	☐ Feasibility Study
Funding	☐ Initiator Only	☐ Other Partipants	☐ Shared Model	☐ Financing required
Availability of Information	☐ Business Requirement Document	☐ Business Case	☐ Financial Proposal	☐ Project Charter
		☐ Project Plan	☐ Specifications	☐ Resource Plan

PROJECT MANAGER TO COMPLETE				
Date Received		**Received By**		
Date Reviewed		**Reviewed By**		
Response to Change	☒ In Progress	☐ Accepted	☐ Rejected	☐ Completed

Date Closed		**Closure Status**	
Closure Notes			

Appendix E: Project Gate/Phase Completion Milestone Certificate

Organization / Company
logo

PROJECT GATE/PHASE COMPLETION MILESTONE CERTIFICATE

Project Details

Project Name	*Project name*
Milestone Description	*Brief description of the milestone*
Date of Completion	*Date that the milestone was achieved*

Milestone Information

This certificate provides confirmation of the successful completion of the following:
List of items achieved at the milestone

Milestone Conditions

Any condition set as part off gate sign off

Milestone Sign off

Sign off by project steering committee/sponsor or any other mandated person or body

Signed on Behalf of Participant	Full Name	Signature	Date

PAN
PAYMENTS ASSOCIATION OF NAMIBIA

Appendix F: Mapping of processes into process groups and knowledge areas (PMBOK® guide)

KNOWLEGDE AREAS (KA)	PROCESS GROUPS				
	Initiating Process Group	**Planning Process Group**	**Executing Process Group**	**Monitoring & Controlling Process Group**	**Closing Process Group**
Project Integration Management	Develop Project Charter	Develop Project Management Plan	Direct and Manage Project Work	Monitor and Control Project Work Perform Integrated Change Control	Close Project or Phase
Project Scope Management		Plan Scope Management Collect Requirements Define Scope Create WBS		Validate Scope Control Scope	
Project Time Management		Plan Schedule Management Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Durations Develop Schedule		Control Schedule	
Project Cost Management		Plan Cost Management Estimate Costs Determine Budget		Control Costs	

Project Quality Management		Plan Quality Management	Perform Quality Assurance	Control Quality	
Project Human Resource Management		Plan Human Resource Management	Acquire Project Team Develop Project Team Manage Project Team		
Project Communications Management		Plan Communication Management	Manage Communications	Control Communications	
Project Risk Management		Plan Risk Management Identify Risks Perform Qualitative Risk Analysis Perform Quantitative Risk Analysis Plan Risk Responses		Control Risks	
Project Procurement Management		Plan Procurement Management	Conduct Procurements	Control Procurements	Close Procurements
Project Stakeholder Management	Identify Stakeholders	Plan Stakeholder Management	Manage Stakeholder Engagement	Control Stakeholder Engagement	

Table 13: Mapping of processes into process groups and knowledge areas.

Appendix G: Project Closure Report Template

Organization / Company
logo

Project Closure Report

Project Name

Date

Documentation Information	
Document Name	
Document Version	
Document Author	
Status	

Document Version History			
Version	**Author**	**Date**	**Comment**

Table of Content

Put table of content here

1. Objective

Brief description of the purpose of the project closure report including project objective

2. Status of project success criteria

Status of outputs, products or other criteria that when met determines whether the project has been successful as described in the project charter.

3. Planned vs Actual

3.1 Scope

Planned scope vs actual requirements met

3.2 Schedule

Planned timelines vs the actual project timelines

3.3 Budget

Planned budget vs actual expenditures

4. Human resources

Human resources deployed during the project including training and tasks carried out.

5. Communication and Stakeholder Engagements

Communications and project stakeholder engagements undertaken throughout the project lifecycle.

6. Risks and Issues

Identified risks and issues encountered as well as responses implemented and their outcomes.

7. Procurements

Description of processes and activities followed to source products and services from external sources.

8. Outstanding Items Requiring attention

List of outstanding items emanating from the project requiring further attention.

9. Stakeholder Assessment

Results of a survey conducted among stakeholders to gauge their satisfaction with the project activities and outcomes.

10. Lessons Learned

Lists of lessons learned throughout the project lifecycle including recommendations to improve future project processes.

11. Project Closure Report Sign offs

_____ _____

Signature Date

Name:

Project Manager

Signature
Nam:
Project Sponsor

Date

Signature
Name:
Steering Committee Member

Date

Signature
Name:
Steering Committee Member

Date

Signature
Name:
Steering Committee Member

Date

Signature
Name:
Steering Committee Member

Date

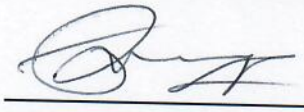
References

1. PMI (2013) – Guide to Project Management Body of Knowledge – 5th Edition
2. CompTIA (2006) – Glossary of Standard Project Management Terms
3. Bank of Namibia, PAN, BAN – Namibia National Payment System Vision 2020
4. PAN – Project Management Office (PMO) Industry Test Methodology

Approval

The NPS Project Management Framework is hereby approved.

CERTIFIED AS APPROVED BY THE PAN MANAGEMENT COUNCIL ON THE 3rd DAY OF September 2018



SIGNATURE
JACOBUS KEYSER
CHAIRPERSON: PAN MANAGEMENT COUNCIL

~ END ~