
PROJECT LIFE CYCLE

National Currency Printing and Secure Banknote Production Facility Project
(NCPBF)



Project Title:

National Currency Printing and Secure Banknote Production Facility Project
(NCPBF)

Project Sponsor:

Central Bank

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1. Life Cycle Overview

The National Currency Printing and Secure Banknote Production Facility Project (NCPBF) follows a structured, stage-gated, hybrid project life cycle designed to address the complexity, security sensitivity, regulatory oversight, and infrastructure-intensive nature of the initiative.

The life cycle integrates:

- A predictive (plan-driven) approach for facility construction, machinery installation, regulatory compliance, and financial control.
- Controlled adaptive elements for IT systems, cybersecurity integration, and production management configuration.
- Formal stage-gate governance reviews at key decision points to ensure strategic alignment, financial discipline, risk control, and security compliance.

This life cycle ensures disciplined execution while allowing controlled flexibility where technical integration requires iterative validation.

2. Life Cycle Structure

The project life cycle consists of eight structured phases, each separated by formal governance approval gates.

Phase 1: Concept and Strategic Authorization

Objective

To confirm strategic justification, national alignment, financial viability, and executive authorization.

Key Activities

- Strategic needs assessment and justification
 - Security and compliance feasibility review
 - High-level cost-benefit analysis
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- Preliminary risk identification
- Funding confirmation
- Governance framework definition

Key Deliverables

- Vision Statement
- Business Case
- High-Level Risk Assessment
- Project Charter
- Governance Framework

Gate 1: Strategic Approval

Approval Authority: Project Sponsor and Steering Committee

Outcome: Formal authorization to proceed to detailed planning.

Phase 2: Integrated Planning and Detailed Design

Objective

To develop a fully integrated project baseline covering scope, schedule, cost, risk, procurement, quality, financial controls, and security architecture.

Key Activities

- Detailed facility design
- Security-by-design validation
- Development of Work Breakdown Structure (WBS)
- Scope baseline establishment
- Schedule development and critical path analysis
- Cost estimation and budget baseline approval
- Risk qualitative and quantitative analysis

- Procurement strategy finalization
- Stakeholder engagement planning

Key Deliverables

- Integrated Project Management Plan
- Scope Baseline
- Schedule Baseline
- Cost Baseline
- Risk Register and Risk Report
- Procurement Management Plan
- Financial Management Plan
- Security Design Approval

Gate 2: Baseline and Funding Approval

Approval Authority: Steering Committee and Financial Authority

Outcome: Approval of project baselines and release of execution funding.

Phase 3: Construction and Infrastructure Development

Objective

To construct the secure facility and associated infrastructure in accordance with approved designs and compliance requirements.

Key Activities

- Site preparation and civil works
- Structural construction
- Vault and secure area implementation
- Utilities and environmental control systems
- Health, Safety, and Environmental monitoring

- Construction quality assurance and inspections

Key Deliverables

- Structural completion certification
- Physical security installation reports
- Construction quality reports
- HSE compliance documentation

Gate 3: Structural and Security Inspection Approval

Approval Authority: Security Authorities, PMO, and Sponsor

Outcome: Authorization to proceed to machinery installation.

Phase 4: Machinery Procurement and Installation

Objective

To procure, install, and validate secure printing machinery and associated production systems.

Key Activities

- Vendor oversight and contract management
- Factory Acceptance Testing (FAT)
- Shipment and logistics coordination
- On-site installation and calibration
- Site Acceptance Testing (SAT)

Key Deliverables

- FAT Reports
- SAT Reports
- Installation Certification
- Vendor Performance Reports

Gate 4: Machinery Operational Readiness Approval

Approval Authority: PMO, Technical Board, and Sponsor

Outcome: Authorization to proceed with IT and system integration.

Phase 5: IT Systems and Cybersecurity Integration

Objective

To deploy secure IT infrastructure, production tracking systems, and cybersecurity controls.

Key Activities

- Network and data center configuration
- Production management system implementation
- Cybersecurity architecture deployment
- Access control and monitoring system integration
- Interface testing and validation

Key Deliverables

- Cybersecurity Compliance Certification
- Integrated System Test Reports
- Configuration Baseline Documentation
- Access Control Validation Reports

Gate 5: Cybersecurity and Systems Integration Approval

Approval Authority: Chief Information Security Officer and Security Authorities

Outcome: Authorization to commence full operational testing.

Phase 6: Testing, Commissioning, and Trial Production

Objective

To validate operational capability, system integration, security resilience, and production quality under controlled conditions.

Key Activities

- Integrated system testing
- Trial production runs
- Quality validation and inspection
- Security audit simulations
- Performance benchmarking

Key Deliverables

- Commissioning Certificate
- Trial Production Report
- Quality Validation Report
- Updated Risk Assessment

Gate 6: Operational Acceptance Approval

Approval Authority: Sponsor and Steering Committee

Outcome: Authorization to transition to operational readiness and handover.

Phase 7: Operational Readiness and Transition

Objective

To ensure sustainable operational capability and structured transfer of assets and responsibilities to operations.

Key Activities

- Staff training and certification
- Standard Operating Procedure (SOP) finalization
- Knowledge transfer from vendors
- Asset transfer documentation

- Final financial reconciliation

Key Deliverables

- Operational Readiness Report
- Training Completion Records
- Asset Transfer Documentation
- Final Cost and Performance Report

Gate 7: Formal Handover and Closure Approval

Approval Authority: Project Sponsor

Outcome: Formal project closure and transition to operations.

Phase 8: Benefits Realization and Post-Implementation Review

Objective

To ensure long-term strategic and financial benefits are realized and sustained.

Key Activities

- Benefits performance tracking
- Post-implementation review
- Governance and compliance audit
- Lessons learned consolidation

Key Deliverables

- Benefits Realization Report
- Post-Implementation Review Report
- Final Governance Audit Summary