
REQUIREMENTS DOCUMENTATION

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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Table of Contents

1. Purpose:	3
2. Scope of Requirements:	3
3. Stakeholder Requirements:	3
4. Functional Requirements:	4
5. Non-Functional Requirements:	5
6. Technical Requirements:	6
7. Security Requirements:	6
8. Regulatory and Compliance Requirements:	7
9. Operational Requirements:	8
10. Acceptance Criteria:	8
11. Requirements Traceability Reference:	8

1. Purpose:

This document defines the comprehensive set of requirements necessary for the planning, design, construction, installation, testing, and operational readiness of the National Currency Printing and Secure Banknote Production Facility Project.

The purpose of this document is to ensure that all project stakeholders share a common understanding of the required project deliverables and that the project team can design and implement solutions that satisfy stakeholder expectations, regulatory obligations, operational objectives, and security requirements.

The requirements documented in this section provide the foundation for project scope definition, system design, procurement specifications, and verification activities conducted during testing and commissioning phases.

2. Scope of Requirements:

The requirements documented herein apply to all major components of the NCPBF project, including the secure facility infrastructure, printing machinery installation, IT and cybersecurity systems, physical security controls, testing and commissioning activities, and operational readiness preparation.

These requirements support the successful implementation of a national banknote production facility capable of producing secure currency domestically while maintaining strict security standards, operational efficiency, and regulatory compliance.

3. Stakeholder Requirements:

Stakeholder requirements represent the expectations and needs of key project stakeholders including the Central Bank, government authorities, operational personnel, and security agencies.

ID	Stakeholder	Requirement Description
SR-01	Central Bank Executive Board	Establish a secure national facility capable of producing domestic banknotes independently
SR-02	Central Bank Operations Department	Ensure the facility can support continuous and reliable banknote production

ID	Stakeholder	Requirement Description
SR-03	National Security Authorities	Implement robust physical and cybersecurity measures to protect currency production processes
SR-04	Government Regulatory Authorities	Ensure compliance with national construction, safety, and financial regulations
SR-05	Facility Operations Team	Provide a safe, efficient, and controlled production environment
SR-06	Security Department	Establish multi-layer security systems for access control and monitoring
SR-07	IT Department	Ensure secure IT infrastructure and production tracking systems
SR-08	Quality Management Unit	Ensure the production process meets strict quality standards for banknotes
SR-09	Financial Oversight Authorities	Ensure transparency and control of production materials and inventory
SR-10	Project Governance Board	Ensure project deliverables are completed within approved scope, schedule, and budget constraints

4. Functional Requirements:

Functional requirements describe the operational capabilities that the facility and its systems must provide.

ID	Functional Requirement
FR-01	The facility shall support secure production of national currency banknotes
FR-02	Printing machinery shall support high-security banknote printing processes
FR-03	Production systems shall record and track all banknote production activities

ID	Functional Requirement
FR-04	Inventory management systems shall track secure materials including banknote paper and security inks
FR-05	Access control systems shall manage personnel access to restricted production areas
FR-06	Surveillance systems shall monitor all critical production zones
FR-07	Security systems shall generate alerts for unauthorized access attempts
FR-08	The facility shall support controlled storage of sensitive materials within secure vault areas
FR-09	Production machinery shall support precision printing and quality verification processes
FR-10	Operational systems shall allow monitoring of production performance metrics

5. Non-Functional Requirements:

Non-functional requirements define the operational performance, reliability, and quality characteristics required by the facility.

ID	Non-Functional Requirement
NFR-01	The facility shall maintain environmental conditions suitable for banknote printing
NFR-02	Systems shall maintain a minimum operational uptime of 99.5%
NFR-03	Surveillance systems shall record continuous video monitoring
NFR-04	Data storage systems shall ensure secure retention of production records
NFR-05	Network infrastructure shall ensure secure communication between systems

ID	Non-Functional Requirement
NFR-06	Systems shall support backup and disaster recovery capabilities
NFR-07	The facility shall comply with workplace safety standards
NFR-08	The facility shall maintain redundancy for critical operational systems

6. Technical Requirements:

Technical requirements define the technology infrastructure necessary to support secure currency production.

ID	Technical Requirement
TR-01	Printing machinery must support advanced banknote printing technologies
TR-02	Machinery installation must comply with manufacturer specifications
TR-03	Network infrastructure must support secure system integration
TR-04	Data centers must support secure storage of operational data
TR-05	Cybersecurity infrastructure must support threat detection and prevention
TR-06	Environmental control systems must regulate humidity and temperature levels
TR-07	Power infrastructure must support uninterrupted facility operations
TR-08	Backup generators and UPS systems must ensure operational continuity

7. Security Requirements:

Security requirements ensure the facility maintains strict protection of currency production processes and sensitive assets.

ID	Security Requirement
SEC-01	Multi-layer access control systems must be implemented
SEC-02	Biometric authentication shall be used in high-security zones
SEC-03	Intrusion detection systems shall monitor perimeter security
SEC-04	CCTV surveillance systems shall cover all production and storage areas
SEC-05	Access logs shall record all personnel movements in restricted areas
SEC-06	Cybersecurity monitoring shall detect unauthorized system access
SEC-07	Secure vaults shall protect stored banknotes and sensitive materials
SEC-08	Security incident response procedures shall be established

8. Regulatory and Compliance Requirements:

Compliance requirements ensure the facility operates according to national regulations and security policies.

ID	Compliance Requirement
CR-01	Facility design must comply with national construction standards
CR-02	Construction activities must comply with workplace safety regulations
CR-03	Cybersecurity systems must comply with national IT security policies
CR-04	Financial control systems must comply with Central Bank regulations
CR-05	Environmental management practices must comply with environmental protection laws

9. Operational Requirements:

Operational requirements ensure the facility functions effectively after project completion.

ID	Operational Requirement
OR-01	Operational staff must be trained in machinery operation
OR-02	Security staff must be trained in facility security procedures
OR-03	Maintenance procedures must be established for all equipment
OR-04	Standard operating procedures must be documented for production activities
OR-05	Emergency response procedures must be established for security incidents

10. Acceptance Criteria:

Acceptance criteria define how requirements will be validated during testing and commissioning.

Requirement ID	Acceptance Criteria
FR-01	Trial banknote production successfully produces approved test banknotes
FR-02	Printing machinery passes operational performance testing
SEC-01	Security systems successfully detect simulated intrusion attempts
NFR-01	Environmental control systems maintain stable production conditions
TR-05	Cybersecurity systems pass penetration testing validation
OR-01	Staff complete required training and certification programs

11. Requirements Traceability Reference:

All requirements defined in this document will be mapped and tracked through the Requirements Traceability Matrix (RTM). The RTM will link requirements to design

specifications, implementation activities, testing procedures, and final acceptance verification.

This traceability ensures that all requirements are implemented, validated, and approved before the facility transitions into full operational status.