

Project Cost Baseline:



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

SN	WBS	Control Account	Work Package	Activities (Step-by-step)	Unit Item	Qty	Unit Price (USD)	Total Price (USD)	Remarks
1	1.1.1	1.1 Governance & PM	Project Charter Finalization and Approval	Draft charter → validate scope/objectives → align governance & authority → stakeholder review → sponsor final approval & signature → archive under config control	LS	1	\$ 400,000.00	\$ 400,000.00	Includes workshops, legal review, approval pack
2	1.1.2	1.1 Governance & PM	Governance Framework Implementation	Establish steering/boards → define decision rights & escalation → create RACI/authority matrix → approve governance calendar → activate reporting cadence → enforce SoD controls	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	Includes PMO setup, governance tooling
3	1.1.3	1.1 Governance & PM	Integrated Schedule Development	Confirm WBS logic → define sequencing → build IMS (Level 1–4) → validate dependencies/critical path → integrate stage-gates → baseline approval → publish controlled schedule	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Planning team + scheduling system
4	1.1.4	1.1 Governance & PM	Cost Baseline Development	Develop CBS aligned to WBS → estimate packages → set contingency rules → define cost control thresholds → approve funding profile → baseline & lock	LS	1	\$ 800,000.00	\$ 800,000.00	Includes cost model + reporting setup
5	1.1.5	1.1 Governance & PM	Risk, Issue & Change Control Management	Build risk register/logs → define CCB process → set impact analysis templates → run monthly reviews → manage changes (scope/cost/schedule/security) → maintain audit trail	LS	1	\$ 2,200,000.00	\$ 2,200,000.00	Includes change control operations

6	1.1.6	1.1 Governance & PM	Stage-Gate Reviews and Approvals	Define gate criteria → prepare gate packs → verify deliverables → risk & readiness assessment → steering approvals → record minutes → authorize next phase	LS	1	\$ 1,200,000.00	\$ 1,200,000.00	Covers all gates Month 0–60
7	1.1.7	1.1 Governance & PM	Security Governance Oversight	Establish security board → define classification rules → approve access models → review security designs → validate SoD enforcement → authorize security-critical transitions	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Security governance controls
8	1.1.8	1.1 Governance & PM	Benefits Tracking Mechanisms	Confirm benefits KPIs → create benefits register → set reporting cadence → baseline targets → monitor realization → governance reporting & corrective actions	LS	1	\$ 600,000.00	\$ 600,000.00	Benefits dashboard + KPI governance
9	1.1.9	1.1 Governance & PM	Configuration & Document Control	Configure repository → define templates/versioning → classify documents → manage baselines → access rights & audit log → controlled distribution	LS	1	\$ 800,000.00	\$ 800,000.00	Controlled repository + CM operations
10	1.2.1	1.2 Facility Design & Construction	Secure Site Preparation	Land clearance → geotech/soil tests → grading/excavation → drainage prep → temporary secure fencing → guard posts → controlled entry setup → HSE kickoff	LS	1	\$ 8,000,000.00	\$ 8,000,000.00	Includes temporary security + enabling works
11	1.2.2	1.2 Facility Design & Construction	Architectural & Engineering Design	User needs capture → concept design → secure zoning layout → structural/MEP design → vault design → fire/life safety → independent validation → security review → design baseline approval	LS	1	\$ 6,000,000.00	\$ 6,000,000.00	Full A/E + independent validation
12	1.2.3	1.2 Facility Design & Construction	Physical Security Perimeter Construction	Build perimeter walls/fencing → anti-climb features → lighting → guard towers/posts → gatehouses → perimeter IDS conduit → mount infrastructure → test blind-spots → security approval	LS	1	\$ 10,000,000.00	\$ 10,000,000.00	Integrates with later CCTV/IDS

13	1.2.4	1.2 Facility Design & Construction	Structural Construction of Production Facility	Foundations → reinforced structure → production halls → internal partitions → machine foundations/load platforms → vibration isolation → QA/QC inspections → material certifications → stage-gate signoff	LS	1	\$ 60,000,000.00	\$ 60,000,000.00	Largest civil/structural package
14	1.2.5	1.2 Facility Design & Construction	Controlled Access Zone Construction	Build classified zones → secure doors/partitions → access corridors → mantraps where required → signage & zoning → test movement paths → security validation	LS	1	\$ 8,000,000.00	\$ 8,000,000.00	Supports SoD and insider risk controls
15	1.2.6	1.2 Facility Design & Construction	Vault & Secure Storage Construction	Reinforced vault structure → certified locking → environmental stabilization → CCTV/IDS interfaces → penetration resistance testing → security certification	LS	1	\$ 12,000,000.00	\$ 12,000,000.00	Vaults + secure storage rooms
16	1.2.7	1.2 Facility Design & Construction	Environmental Control Systems Installation	HVAC → humidity control → filtration/particulate control → sensors & monitoring → redundancy commissioning → acceptance testing	LS	1	\$ 6,000,000.00	\$ 6,000,000.00	Production-grade environmental stability
17	1.2.8	1.2 Facility Design & Construction	Utilities & Backup Systems Installation	Electrical distribution → backup generators → UPS → water systems → fire suppression → emergency systems → load tests/failover simulations → safety certification	LS	1	\$ 8,000,000.00	\$ 8,000,000.00	Resilience & continuity controls
18	1.2.9	1.2 Facility Design & Construction	HSE Compliance Implementation	HSE plan rollout → training → toolbox talks → inspections/audits → incident reporting → corrective actions → environmental controls → compliance signoff	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	Continuous across construction
19	1.3.1	1.3 Printing Machinery & Equipment	Procurement of Printing Presses	Define specs → prequal vendors → tendering → eval (tech/commercial/security) → contract award → manufacturing oversight → warranty/spares/training terms → governance approval	LS	1	\$ 95,000,000.00	\$ 95,000,000.00	Includes presses + vendor obligations

20	1.3.2	1.3 Printing Machinery & Equipment	Procurement of Finishing & Inspection Equipment	Define finishing/inspection specs → tender/eval → interoperability checks → contract award → FAT planning → delivery readiness	LS	1	\$ 25,000,000.00	\$ 25,000,000.00	Cutting/numbering/bundling/inspection
21	1.3.3	1.3 Printing Machinery & Equipment	Secure Logistics & Delivery	Secure shipment plan → insurance → escorts → chain-of-custody → customs (if any) → secure unloading → controlled storage → delivery inspection	LS	1	\$ 5,000,000.00	\$ 5,000,000.00	High-security transport & handling
22	1.3.4	1.3 Printing Machinery & Equipment	Machinery Installation & Mechanical Alignment	Site readiness verification → rigging/placement → anchoring → alignment → vibration calibration → utility hook-up → installation QA signoff	LS	1	\$ 10,000,000.00	\$ 10,000,000.00	Vendor-supervised installation
23	1.3.5	1.3 Printing Machinery & Equipment	System Integration with Facility Infrastructure	Integrate with power/HVAC → integrate with OT/IT interfaces → secure data pathways → verify interoperability → integration tests	LS	1	\$ 5,000,000.00	\$ 5,000,000.00	OT/IT + facility integration
24	1.3.6	1.3 Printing Machinery & Equipment	Vendor-Supervised Configuration	Controlled vendor access → parameter setup → inspection thresholds → logging setup → configuration documentation → security signoff	LS	1	\$ 4,000,000.00	\$ 4,000,000.00	Includes secure supervision & logs
25	1.3.7	1.3 Printing Machinery & Equipment	Calibration & Technical Validation	Calibration → trial runs → precision testing → defect/throughput measurement → validation reports → commissioning readiness approval	LS	1	\$ 6,000,000.00	\$ 6,000,000.00	Acceptance tied to thresholds
26	1.4.1	1.4 IT & Cybersecurity	Production Management System Implementation	Design architecture → configure PMS → integrate with machines → enable immutable logs → RBAC mapping → UAT → governance go-live approval	LS	1	\$ 6,000,000.00	\$ 6,000,000.00	Core production control system
27	1.4.2	1.4 IT & Cybersecurity	Inventory Tracking System Deployment	Define material taxonomy → configure workflows → authorization rules → integrate with access/surveillance → reconciliation & anomaly detection → acceptance	LS	1	\$ 3,000,000.00	\$ 3,000,000.00	Full traceability of materials

28	1.4.3	1.4 IT & Cybersecurity	Role-Based Access Control System	Define roles → privilege mapping → MFA → periodic access reviews → integrate with biometrics where required → test unauthorized access	LS	1	\$ 2,500,000.00	\$ 2,500,000.00	Enforces segregation-of-duties
29	1.4.4	1.4 IT & Cybersecurity	Surveillance & Monitoring Platform Integration	Central monitoring design → secure storage → retention policies → alert rules → SOC procedures → test feeds/alerts → approval	LS	1	\$ 2,500,000.00	\$ 2,500,000.00	Cyber-secure monitoring platform
30	1.4.5	1.4 IT & Cybersecurity	Cybersecurity Architecture Deployment	Deploy firewalls/IDS/IPS → endpoint protection → encryption → centralized logging → incident response integration → validation	LS	1	\$ 4,000,000.00	\$ 4,000,000.00	Defense-in-depth controls
31	1.4.6	1.4 IT & Cybersecurity	Network Segmentation & Security Controls	OT/IT separation → VLANs → secure gateways → restrict external paths → monitor lateral movement → verify segmentation	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	OT protection and containment
32	1.4.7	1.4 IT & Cybersecurity	Data Protection & Backup Systems	Encryption at rest/in transit → backup/DR setup → retention policy → recovery testing → DR simulation signoff	LS	1	\$ 3,000,000.00	\$ 3,000,000.00	Proven recoverability required
33	1.4.8	1.4 IT & Cybersecurity	Penetration Testing & Vulnerability Assessment	Independent testing → remediation log → patch validation → retest → security board clearance → stage-gate approval	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	Mandatory pre-go-live clearance
34	1.5.1	1.5 Physical Security Systems	Multi-Layer Access Control Installation	Design layers → procure hardware → install readers/doors/turnstiles → central logging → integrate with CCTV/IDS → simulate unauthorized access → approval	LS	1	\$ 5,000,000.00	\$ 5,000,000.00	Perimeter-to-vault access control
35	1.5.2	1.5 Physical Security Systems	Biometric System Deployment	Enrollment process → install devices → encrypted storage → RBAC integration → accuracy testing → failover testing → certification	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	High-security zones
36	1.5.3	1.5 Physical Security Systems	CCTV & Surveillance Installation	Camera layout → install cams/NVRs → secure transmission → retention policy → eliminate blind spots → coverage validation → approval	LS	1	\$ 3,000,000.00	\$ 3,000,000.00	Evidence-grade recording

37	1.5.4	1.5 Physical Security Systems	Alarm & Intrusion Detection Systems	Install sensors/panels → configure alerts → integrate with monitoring → intrusion simulations → power/network failover tests → security signoff	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	Real-time escalation readiness
38	1.5.5	1.5 Physical Security Systems	Visitor Management System	Pre-registration workflows → ID verification → temporary credentials → escort rules → audit logs → integration with access/CCTV → acceptance	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Full visitor traceability
39	1.5.6	1.5 Physical Security Systems	Secure Materials Handling Controls	Define secure corridors → dual-control steps → scanning points → tamper-evident packaging → reconciliation checkpoints → exception alerts validation	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	Links to inventory + surveillance
40	1.6.1	1.6 Testing & Commissioning	Factory Acceptance Testing (FAT)	FAT plan → execute tests at vendor → log nonconformances → corrective actions → re-test → approve shipment authorization	LS	1	\$ 1,500,000.00	\$ 1,500,000.00	Pre-shipment compliance
41	1.6.2	1.6 Testing & Commissioning	Site Acceptance Testing (SAT)	SAT plan → run installed equipment tests → validate utilities/environment → interface checks → fix defects → SAT signoff	LS	1	\$ 1,500,000.00	\$ 1,500,000.00	On-site operational validation
42	1.6.3	1.6 Testing & Commissioning	Integrated System Testing	End-to-end simulation → validate data flows → confirm audit logs → verify interoperability → resolve conflicts → governance approval	LS	1	\$ 1,500,000.00	\$ 1,500,000.00	OT/IT/security integrated proof
43	1.6.4	1.6 Testing & Commissioning	Trial Production Runs	Controlled pilot runs → measure throughput/defects → reconcile materials → adjust parameters → document results → approval to proceed	LS	1	\$ 1,500,000.00	\$ 1,500,000.00	Demonstrates production stability
44	1.6.5	1.6 Testing & Commissioning	Quality Validation	Quality standards verification → inspection certification → independent review → close NCRs → quality approval	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Quality acceptance evidence
45	1.6.6	1.6 Testing & Commissioning	Security Validation	Penetration simulations → access stress tests → IDS response drills → audit log review → close findings → security board clearance	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Mandatory before readiness

46	1.6.7	1.6 Testing & Commissioning	Operational Readiness Verification	Readiness checklist → competency evidence review → SOP readiness → emergency preparedness → residual risk check → executive authorization	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Gate to formal handover
47	1.6.8	1.6 Testing & Commissioning	Performance Benchmark Testing	Sustained-load run → capture baseline KPIs → downtime tolerance tests → environmental stability verification → approve benchmarks	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Baselines for post-handover
48	1.7.1	1.7 Training & Capacity	Machinery Operation Training	Develop curriculum → vendor-led sessions → hands-on operation → troubleshooting drills → assessments → certification → archive records	LS	1	\$ 4,000,000.00	\$ 4,000,000.00	Operators + supervisors
49	1.7.2	1.7 Training & Capacity	Security Protocol Training	Develop security manuals → drills/simulations → incident reporting practice → SoD training → assessment → security authority approval	LS	1	\$ 2,000,000.00	\$ 2,000,000.00	Mandatory for cleared staff
50	1.7.3	1.7 Training & Capacity	Cybersecurity Awareness Training	Modules → phishing simulations → secure usage rules → incident reporting → assessment → IT security validation	LS	1	\$ 1,200,000.00	\$ 1,200,000.00	Organization-wide awareness
51	1.7.4	1.7 Training & Capacity	Maintenance Training	Preventive maintenance program → diagnostics → spares control → calibration routines → recovery procedures → certification	LS	1	\$ 2,500,000.00	\$ 2,500,000.00	Reduces vendor dependency
52	1.7.5	1.7 Training & Capacity	Governance & Compliance Orientation	Governance structure → reporting cadence → change control rules → audit readiness → document control training → validation	LS	1	\$ 800,000.00	\$ 800,000.00	Builds disciplined operations
53	1.7.6	1.7 Training & Capacity	Vendor Knowledge Transfer	Handover manuals/configs → walkthroughs → shadowing → Q&A workshops → independence validation → vendor signoff	LS	1	\$ 1,800,000.00	\$ 1,800,000.00	Structured transfer evidence
54	1.7.7	1.7 Training & Capacity	SOP Development & Documentation	Draft SOPs → validate with trial runs → security review → governance approval → version control → release & training	LS	1	\$ 1,700,000.00	\$ 1,700,000.00	Controlled SOP library

55	1.7.8	1.7 Training & Capacity	Competency Validation	Exams → practical demonstrations → simulations → certify critical roles → remediate gaps → final competency approval	LS	1	\$ 1,200,000.00	\$ 1,200,000.00	Required before transition
56	1.8.1	1.8 Operational Readiness	SOP Finalization & Approval	Final SOP review → incorporate lessons → verify SoD/security → approval routing → controlled release → archive baselines	LS	1	\$ 700,000.00	\$ 700,000.00	Final SOP package approval
57	1.8.2	1.8 Operational Readiness	Handover Documentation	Compile as-built docs → manuals/warranties → security clearances → training records → config baseline pack → completeness verification → signoff	LS	1	\$ 1,000,000.00	\$ 1,000,000.00	Full handover dossier
58	1.8.3	1.8 Operational Readiness	Asset Transfer Documentation	Asset tagging → serial verification → registry updates → warranty assignment → access rights reassignment → audit traceability	LS	1	\$ 800,000.00	\$ 800,000.00	Finance + CM validated
59	1.8.4	1.8 Operational Readiness	Performance Baseline Establishment	Define KPIs → set monitoring cadence → validate baseline from benchmarks → governance endorsement → publish dashboards	LS	1	\$ 600,000.00	\$ 600,000.00	Post-handover performance control
60	1.8.5	1.8 Operational Readiness	Formal Transition to Operations	Transition plan → authority reassignment → transition meetings → confirm support model → executive acceptance memo → operational start	LS	1	\$ 700,000.00	\$ 700,000.00	Controlled cutover
61	1.8.6	1.8 Operational Readiness	Benefits Ownership Transfer	Assign KPI owners → reporting schedule → integrate into governance cycle → confirm accountability matrix → approval	LS	1	\$ 400,000.00	\$ 400,000.00	Benefits sustainment
62	1.8.7	1.8 Operational Readiness	Project Closure & Governance Sign-Off	Verify scope completion → contracts closure → financial reconciliation → lessons learned → archive repository → final steering signoff	LS	1	\$ 600,000.00	\$ 600,000.00	Formal closure package
Total Cost								\$	350,000,000.00
Contingency Reserves								\$	10,100,000.00
Cost Baseline (BAC)								\$	360,100,000.00

COST BASELINE (BAC) | \$

500,100,000.00