BUSINESS CASE

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. Executive Summary:

1.1 Business Case Overview:

This Business Case evaluates the justification, feasibility, and strategic value of establishing a National Currency Printing and Secure Banknote Production Facility in Afghanistan, under the leadership and oversight of the Central Bank. The purpose of this initiative is to enable Afghanistan to produce its own banknotes domestically, rather than relying on external and foreign printing arrangements.

At present, the production of Afghan banknotes is outsourced to international printing facilities. While this approach has enabled continuity of currency supply, it has also resulted in high long-term costs, significant security and confidentiality risks, extended lead times, and limited institutional control over critical aspects of currency production. These challenges directly affect monetary operations, cash management efficiency, and the overall resilience of the financial system.

This Business Case demonstrates that investing in a secure, modern, and internationally compliant domestic banknote printing facility is both feasible and strategically necessary for Afghanistan. The proposed facility will be capable of designing, printing, numbering, cutting, and packaging banknotes, supported by robust physical security, cybersecurity, quality control, and governance systems.

Beyond cost considerations, the initiative represents a strategic transformation for the Central Bank, strengthening monetary sovereignty, enhancing national security, and building long-term institutional capacity. The Business Case confirms that, with appropriate governance, phased implementation, and risk management, the proposed investment can deliver substantial financial, operational, and strategic benefits over its lifecycle.

1.2 Strategic Recommendation:

Based on a comprehensive assessment of strategic alignment, feasibility, costs, benefits, and risks, the recommended course of action is to proceed with the establishment of a fully domestic, Central Bank–owned banknote printing facility in Afghanistan.

This recommendation is driven by several critical strategic factors. First, domestic banknote production significantly reduces Afghanistan's dependency on external

entities for one of the most sensitive national functions. Second, it strengthens the Central Bank's ability to respond rapidly to changes in currency demand, replacement cycles, and monetary policy requirements. Third, it enhances control over banknote security features, anti-counterfeiting measures, and quality standards, which are essential for maintaining public confidence in the national currency.

From an economic perspective, although the initial capital investment is substantial, long-term analysis indicates that domestic production is more cost-effective than continuous outsourcing, particularly when transportation, insurance, confidentiality measures, and emergency printing costs are considered. Additionally, the project contributes to local capacity development, creating a highly skilled workforce in security printing, engineering, IT, and quality management.

Strategically, this initiative aligns with Afghanistan's long-term objective of strengthening core financial institutions, improving economic resilience, and safeguarding the integrity of its banknotes. For these reasons, the Business Case strongly supports proceeding with the project under a structured, well-governed implementation model.

1.3 Investment Decision Summary:

The Business Case seeks formal approval for a multi-year capital investment to design, build, equip, and operationalize a secure banknote production facility under the authority of the Central Bank of Afghanistan. The investment includes expenditures related to infrastructure, high-security printing machinery, IT and cybersecurity systems, training, commissioning, and transition to operations.

The expected outcomes of this investment include:

- Long-term reduction in banknote production and logistics costs
- Enhanced security and confidentiality of Afghanistan's banknotes
- Improved operational control and flexibility for the Central Bank
- Strengthened institutional capability and reduced external dependency
- Sustainable and resilient currency production aligned with international standards

The investment decision is supported by clear strategic benefits, acceptable and manageable risks, and strong alignment with Afghanistan's monetary and financial stability objectives. Approval of this Business Case authorizes progression to detailed planning, procurement, and implementation in accordance with established project governance and PMO oversight mechanisms.

2. Background and Context:

2.1 Overview of Afghanistan's Currency and Banknote System:

Afghanistan's monetary system is centered on the issuance, regulation, and management of its national currency by the Central Bank of Afghanistan. Banknotes play a critical role in the Afghan economy, as cash remains the dominant medium of exchange for households, businesses, and public-sector transactions. A significant portion of economic activity, particularly in rural and informal markets, relies almost entirely on physical banknotes rather than electronic or card-based payments.

The Central Bank is responsible for ensuring that banknotes in circulation are sufficient in quantity, acceptable in quality, and trusted by the public. This includes managing denomination structures, replacing worn or damaged notes, preventing counterfeiting, and maintaining confidence in the currency as a store of value and medium of exchange. Given the limited penetration of digital financial services and banking infrastructure, the reliability and integrity of physical banknotes are especially vital for economic stability in Afghanistan.

Banknote lifecycle management—covering design, printing, issuance, circulation, replacement, and withdrawal—is therefore a core sovereign function. Any disruption, delay, or compromise in banknote production can have direct consequences for liquidity, price stability, and public confidence in the financial system.

2.2 Current Banknote Printing Arrangement (External Dependency):

At present, Afghanistan does not possess a fully operational domestic banknote printing facility. As a result, the Central Bank relies on external, foreign-based security printing companies for the production of Afghan banknotes. Under this arrangement, banknotes are designed or finalized domestically, but the actual printing, numbering, finishing, and packaging are conducted outside the country.

This external dependency involves complex logistics, including international transportation, insurance, secure handling, and coordination with foreign vendors. Production schedules must be planned far in advance, and emergency or unanticipated increases in banknote demand are difficult to accommodate

quickly. In addition, sensitive technical details related to banknote security features must be shared with external parties, increasing exposure to confidentiality and security risks.

While outsourcing has allowed continuity of banknote supply, it places Afghanistan in a reactive position, dependent on external timelines, geopolitical conditions, vendor availability, and international transport constraints. This model limits the Central Bank's operational flexibility and reduces direct control over one of the most sensitive elements of national financial infrastructure.

2.3 Challenges in the Existing Model:

The current externally dependent model presents several structural and strategic challenges for Afghanistan.

From a financial perspective, outsourced banknote printing is costly over the long term. Costs extend beyond printing fees to include transportation, insurance, security arrangements, foreign exchange exposure, and contract management. Over time, these recurring expenses can exceed the cost of investing in domestic production capacity.

From a security and confidentiality perspective, outsourcing inherently increases risk. Banknotes incorporate advanced anti-counterfeiting features, serial numbering systems, and confidential production processes. Each additional external interface increases the potential exposure of sensitive information and materials.

From an operational perspective, long lead times reduce the Central Bank's ability to respond quickly to changes in currency demand, such as seasonal cash needs, replacement of unfit notes, or economic shocks. Delays in banknote availability can disrupt liquidity management and cash distribution across the country.

Strategically, reliance on external printing undermines monetary sovereignty, as a critical national function remains outside domestic control. This dependency is inconsistent with long-term institutional strengthening and resilience objectives for Afghanistan's financial system.

2.4 Strategic Importance of Domestic Banknote Production:

Establishing a domestic banknote printing facility represents a strategic investment in Afghanistan's monetary sovereignty, institutional capacity, and

economic resilience. Domestic production would give the Central Bank direct control over the entire banknote lifecycle, from production planning to quality assurance and security management.

A local facility would significantly improve responsiveness and flexibility, enabling faster issuance of banknotes, timely replacement of unfit currency, and better alignment with monetary policy needs. It would also reduce long-term costs by eliminating recurring international logistics and outsourcing expenses.

From a security standpoint, domestic production strengthens confidentiality, reduces external exposure, and enables tighter oversight of security features and processes. It also allows the Central Bank to continuously upgrade anti-counterfeiting measures in response to emerging threats.

Beyond operational benefits, domestic banknote production contributes to institutional development in Afghanistan by building specialized skills in security printing, engineering, IT, quality management, and governance. Over time, this capability supports a more robust, self-reliant, and credible financial system.

For these reasons, transitioning to domestic banknote production is not merely an infrastructure project, but a strategic national initiative essential to safeguarding Afghanistan's currency, strengthening its Central Bank, and supporting long-term economic stability.

3. Problem Statement:

3.1 Financial and Cost Challenges:

Afghanistan's continued reliance on externally printed banknotes presents a significant and growing financial burden for the Central Bank. Outsourcing banknote production involves not only direct printing costs charged by foreign security printing companies, but also substantial indirect and recurring expenses. These include international transportation costs, insurance premiums for high-value shipments, secure logistics arrangements, foreign currency payments, and contract management overhead.

Because banknotes must be printed in large batches and ordered well in advance, the Central Bank is often required to commit large sums of capital upfront, reducing financial flexibility. Emergency printing or unplanned replacement of damaged or unfit banknotes typically results in premium pricing, further increasing costs. Over time, these recurring expenditures accumulate and can exceed the cost of establishing and operating a domestic facility.

Additionally, dependence on external suppliers exposes Afghanistan to foreign exchange risks, as printing contracts are usually denominated in foreign currencies. Exchange rate volatility can significantly increase the effective cost of banknote production, making budgeting and long-term financial planning more difficult. This cost structure is unsustainable in the long term and diverts financial resources that could otherwise be invested in strengthening domestic institutional capacity.

3.2 Security and Confidentiality Risks:

Banknote production is among the most security-sensitive activities undertaken by a central bank. Afghan banknotes incorporate specialized security features, serial numbering systems, inks, papers, and production processes designed to prevent counterfeiting and maintain public confidence in the currency. When production occurs outside Afghanistan, sensitive technical information and materials must be shared with external entities, inherently increasing confidentiality and security risks.

Each additional external interface—foreign vendors, logistics providers, insurers, and transit authorities—creates potential points of exposure. While contractual

safeguards exist, absolute control over confidentiality cannot be guaranteed when critical production steps occur beyond national jurisdiction. Any compromise, leakage of information, or unauthorized replication of security features would have severe consequences, including increased counterfeiting risk and erosion of trust in Afghan banknotes.

Furthermore, transporting large volumes of newly printed banknotes across international borders introduces additional security challenges. Delays, route disruptions, or security incidents during transit could result in financial losses and operational disruptions. From a risk management perspective, the current model places unacceptable reliance on external controls for a function that is fundamentally sovereign and sensitive.

3.3 Operational and Time Constraints:

Operationally, external banknote printing imposes long and inflexible lead times. Production schedules must be finalized months, and sometimes years, in advance, limiting the Central Bank's ability to respond quickly to changes in currency demand. Seasonal cash needs, economic fluctuations, replacement of worn banknotes, or emergency situations often require rapid increases in currency supply—needs that cannot be easily met under the current arrangement.

Delays in production, shipping, or customs clearance can directly impact the availability of banknotes in circulation. In a cash-based economy such as Afghanistan's, shortages or delays in banknote supply can disrupt commerce, public payments, and financial stability. The lack of operational agility undermines effective cash management and weakens the Central Bank's capacity to implement timely monetary interventions.

In addition, coordination across time zones, jurisdictions, and multiple external stakeholders increases operational complexity and reduces transparency. This complexity increases the likelihood of misalignment between planning assumptions and actual delivery outcomes, further stressing operational efficiency.

3.4 Strategic and Sovereignty Concerns:

At a strategic level, continued external dependence for banknote production represents a fundamental sovereignty challenge for Afghanistan. Currency

issuance is a core function of a nation's central bank and a key symbol of economic independence. When banknote production remains outside domestic control, the Central Bank's authority over this essential function is inherently constrained.

This dependency limits Afghanistan's ability to independently manage currency lifecycle decisions, including redesigns, upgrades to security features, and rapid responses to emerging counterfeiting threats. It also creates vulnerability to external political, logistical, or commercial disruptions that are beyond national control.

From an institutional development perspective, reliance on foreign printing prevents the accumulation of domestic expertise in security printing, advanced manufacturing, IT systems, and quality assurance. Over time, this perpetuates dependence rather than building resilience.

In summary, the current model of externally printed banknotes presents financial inefficiencies, elevated security risks, operational limitations, and strategic vulnerabilities. These challenges collectively justify the need for a domestic banknote printing facility as a long-term solution aligned with Afghanistan's monetary sovereignty, financial stability, and institutional strengthening objectives.

4. Business Need and Opportunity:

4.1 National Economic and Monetary Stability Needs:

A stable and reliable supply of banknotes is a fundamental requirement for economic and monetary stability in Afghanistan. Given the high reliance on cash transactions across households, markets, and public-sector payments, any disruption in banknote availability directly affects liquidity, price stability, and public confidence in the financial system. The Central Bank must therefore maintain continuous control over the volume, quality, and timing of banknote issuance.

The current externally dependent model limits the Central Bank's ability to proactively manage currency circulation. Long lead times and rigid production schedules reduce responsiveness to economic changes, seasonal demand fluctuations, or the need to replace worn and damaged notes. In periods of heightened cash demand, this constraint can place pressure on monetary operations and weaken policy effectiveness.

Establishing a domestic banknote production facility addresses this need by enabling direct, timely, and flexible control over banknote supply. It strengthens the Central Bank's capacity to support monetary stability by ensuring that banknotes are available when needed, in the required denominations, and in acceptable condition. This capability is essential for maintaining confidence in the national currency and supporting broader economic stability in Afghanistan.

4.2 Security and Risk Reduction Opportunity:

Domestic banknote production presents a significant opportunity to reduce security, confidentiality, and reputational risks associated with external printing. Banknotes incorporate highly sensitive security features designed to deter counterfeiting and fraud. When production is outsourced, these features and related technical information must be shared beyond national control, increasing exposure to potential compromise.

By localizing production, the Central Bank can implement end-to-end security oversight, including controlled access to facilities, secure handling of materials, strict information classification, and continuous monitoring of production

processes. This significantly reduces the risk of information leakage, unauthorized replication, or manipulation of security features.

In addition, domestic production minimizes risks related to international transportation and logistics, such as delays, theft, or loss during transit. From a risk management perspective, the project represents a proactive move to eliminate critical single-point dependencies and strengthen the overall resilience of Afghanistan's currency system.

4.3 Operational Efficiency and Cost Optimization:

The existing outsourcing model involves repeated and unavoidable costs related to foreign printing contracts, logistics, insurance, and currency exchange exposure. While these costs may appear manageable on a per-order basis, over the long term they represent a structural inefficiency in the management of banknote production.

A domestic facility creates the opportunity to optimize operational costs by converting recurring external expenditures into a controlled internal operating model. Although the initial capital investment is significant, long-term analysis indicates that domestic production can reduce unit printing costs, eliminate international transport expenses, and reduce reliance on foreign currency payments.

Operational efficiency is also improved through shorter production cycles, better coordination between planning and execution, and the ability to prioritize printing based on real-time needs. This flexibility reduces waste, improves inventory management, and enables more efficient replacement of unfit banknotes, ultimately lowering lifecycle costs and improving service delivery.

4.4 Capacity Building and Institutional Strengthening:

Beyond financial and operational considerations, the project presents a major opportunity for capacity building and institutional development within Afghanistan. A domestic banknote printing facility requires advanced skills in security printing, engineering, information technology, quality management, risk control, and governance.

By developing these capabilities internally, the Central Bank strengthens its institutional maturity and reduces long-term dependence on external expertise.

The project enables structured knowledge transfer, specialized training programs, and the establishment of professional standards aligned with international best practices.

This investment in human capital and institutional systems contributes to the long-term sustainability and credibility of the Central Bank. Over time, it supports stronger governance, improved operational discipline, and enhanced confidence among stakeholders and the public. In this way, the project is not only a technical solution, but a strategic opportunity to reinforce Afghanistan's financial institutions and support enduring economic resilience.

5. Strategic Alignment:

5.1 Alignment with Central Bank Mandate

The establishment of a domestic banknote printing facility is fully aligned with the core mandate of the Central Bank of Afghanistan, which includes issuing national currency, safeguarding its integrity, and ensuring the stability and efficiency of the monetary system. Currency issuance and management are not auxiliary activities; they are foundational responsibilities of a central bank and essential to maintaining public trust in the financial system.

Under the current externally dependent model, the Central Bank's ability to exercise full control over banknote production is constrained by external timelines, contractual limitations, and third-party processes. This situation weakens the Central Bank's direct oversight over quality, security, and availability of banknotes. By establishing a domestic production facility, the Central Bank strengthens its ability to fulfill its mandate by exercising end-to-end authority over banknote lifecycle management, from production planning to issuance and replacement.

Furthermore, domestic production supports the Central Bank's responsibility to protect the currency from counterfeiting, degradation, and supply disruption. It enables the Bank to independently enhance security features, respond to emerging threats, and maintain consistent quality standards. In this respect, the proposed project directly reinforces the Central Bank's institutional authority, operational autonomy, and credibility in managing Afghanistan's national currency.

5.2 Alignment with National Monetary Policy Objectives:

Effective monetary policy implementation depends heavily on the availability, reliability, and integrity of currency in circulation. In Afghanistan, where cash remains the dominant medium of exchange, banknotes are a primary transmission mechanism for monetary policy decisions. Any disruption in currency supply or degradation in banknote quality can undermine policy effectiveness and economic stability.

The proposed domestic banknote printing facility aligns with national monetary policy objectives by enabling the Central Bank to respond more rapidly and

precisely to changes in currency demand. Whether driven by economic growth, seasonal cycles, inflationary pressures, or replacement of unfit notes, timely access to banknotes is essential for maintaining liquidity and supporting stable prices.

Domestic production also enhances the Central Bank's capacity to manage denomination structures, circulation volumes, and replacement strategies in a coordinated and timely manner. This operational flexibility supports more effective liquidity management and strengthens the Bank's ability to stabilize markets during periods of economic stress. By reducing dependency on external production schedules, the project directly supports the independence and responsiveness required for sound monetary policy execution in Afghanistan.

5.3 Alignment with Long-Term Economic Sustainability:

From a long-term economic perspective, the project contributes to sustainable financial and institutional development in Afghanistan. While outsourcing banknote production may appear cost-effective in the short term, it represents a recurring financial outflow and a structural dependency that limits domestic value creation.

Investing in domestic banknote production converts recurring external expenditures into a strategic capital investment that delivers long-term economic benefits. Over time, the facility reduces reliance on foreign service providers, lowers lifecycle costs, and stabilizes currency production expenses. This shift improves financial predictability and supports more efficient use of national resources.

In addition, the project contributes to broader economic sustainability by developing specialized skills, creating high-value technical employment, and fostering local expertise in advanced manufacturing and security systems. These capabilities have spillover benefits for other sectors, strengthening Afghanistan's technical and institutional base. In this way, the project aligns with long-term economic sustainability objectives by reinforcing self-reliance, resilience, and prudent financial management.

5.4 Alignment with Institutional Governance and Oversight:

Strong governance and oversight are essential for projects involving high financial value, national security implications, and long-term institutional impact. The proposed project is explicitly aligned with principles of good governance,

transparency, accountability, and control as expected in Afghanistan's public financial and institutional environment.

The project is structured to operate under a clear governance framework involving the Central Bank, relevant ministries, a Steering Committee, and a dedicated Project Management Office (PMO). This governance model ensures clear decision rights, segregation of duties, disciplined change control, and independent assurance throughout the project lifecycle.

By embedding governance, risk management, compliance, and audit mechanisms into project design and execution, the initiative strengthens institutional oversight and reduces the likelihood of mismanagement or uncontrolled change. This alignment with robust governance practices supports not only successful project delivery, but also reinforces public and stakeholder confidence in the Central Bank's ability to manage critical national assets responsibly.

Overall, the project's alignment with institutional governance and oversight frameworks ensures that it is not merely technically feasible, but institutionally sound, accountable, and sustainable within Afghanistan's financial system.

6. Objectives and Success Criteria:

6.1 Business Objectives:

The primary business objective of this initiative is to enable the Central Bank of Afghanistan to achieve full, reliable, and secure control over national banknote production, thereby strengthening monetary operations and public confidence in the national currency.

A key business objective is to eliminate long-term dependency on external banknote printing arrangements. By establishing a domestic facility, the Central Bank seeks to reduce exposure to external commercial, logistical, and geopolitical factors that can disrupt currency supply and undermine financial stability.

Another core objective is to ensure continuity and resilience of banknote availability. The project aims to provide the Central Bank with the capability to respond rapidly to changes in currency demand, replace unfit banknotes efficiently, and manage denomination requirements in a timely manner. This directly supports liquidity management and smooth functioning of the economy.

The project also aims to enhance security and integrity of Afghan banknotes by maintaining strict control over sensitive production processes, materials, and information. This objective supports counter-counterfeiting efforts and preserves trust in the national currency.

6.2 Investment Objectives:

From an investment perspective, the objective is to make a strategic, long-term capital investment that delivers sustainable value rather than recurring short-term expenditures. The project seeks to convert continuous outsourcing costs into a controlled internal operating model that becomes more cost-effective over time.

Another investment objective is to achieve predictable and transparent cost management for banknote production. Domestic production reduces exposure to foreign exchange volatility, emergency printing premiums, and unpredictable logistics costs, enabling more accurate budgeting and financial planning.

The project also aims to maximize return on public investment by ensuring that the facility, machinery, and systems are scalable, adaptable, and aligned with

international standards. This allows future upgrades of banknote security features and production capacity without repeating large external procurement cycles.

Finally, the investment objective includes risk-adjusted value protection, ensuring that financial, security, and operational risks are reduced to acceptable levels through strong governance, PMO oversight, and disciplined project management.

6.3 Measurable Benefits and Success Indicators:

The success of the project will be measured through clearly defined, objective, and verifiable indicators aligned with both business and investment objectives.

Key measurable benefits include:

- **Reduction in external banknote printing costs** over a defined period compared to historical outsourcing expenditures
- **Reduction in average banknote production lead time**, enabling faster response to currency demand
- **Improved availability of fit banknotes**, measured through reduced circulation of damaged or unfit notes
- **Enhanced security performance**, demonstrated by compliance with security standards and absence of major security incidents
- **Increased operational control**, reflected in the Central Bank's ability to plan, produce, and release banknotes without external dependency

Success indicators will also include:

- Successful commissioning and operational readiness of the facility
- Achievement of targeted staff training and certification levels
- Compliance with quality, audit, and governance requirements
- Smooth transition from project delivery to full operational ownership

Collectively, these objectives and success criteria ensure that the project is not evaluated solely on completion of construction or installation, but on its ability to deliver lasting economic, operational, and institutional value for Afghanistan's currency system and Central Bank.

7. Options Analysis (Alternatives Assessment):

This section evaluates realistic alternatives for ensuring a reliable, secure, and cost-effective supply of Afghan banknotes. In line with PMI/PMP business case practice, each option is assessed against consistent criteria: strategic fit, security, operational responsiveness, cost profile, feasibility, risk exposure, and long-term sustainability. The purpose is to identify the option that best supports the Central Bank's mandate while strengthening Afghanistan's monetary resilience.

7.1 Option 1: Continue Outsourcing Banknote Printing:

Description:

Under this option, Afghanistan continues to procure banknotes from established foreign security printing companies, using the existing approach of external production with international logistics and delivery into the country.

What this option includes :

- Continued contracting with foreign banknote printers for all denominations
- Managing banknote demand forecasts and placing production orders periodically
- Managing security requirements through contractual clauses, third-party controls, and logistics safeguards
- Relying on external quality assurance and acceptance processes
- International transportation, insurance, and secure delivery

Advantages:

- No large upfront capital investment for building and equipment
- Access to highly experienced, globally certified printers with proven capabilities
- Existing procurement processes can be maintained with minimal structural change
- Lower immediate complexity compared to creating a domestic facility
- Faster to initiate new printing orders (in administrative terms) than building a facility

Disadvantages:

- High recurring costs: printing fees, transport, insurance, handling, and contract overhead continue indefinitely
- Foreign exchange exposure: payments denominated in foreign currency create budget uncertainty
- Long lead times: production schedules and logistics are typically inflexible; emergency needs are expensive
- Security and confidentiality risks: sensitive security features and production details are handled externally
- Strategic dependency: continued reliance on external entities for a sovereign function
- Limited ability to rapidly adapt security features or print small batches based on local demand patterns
- Reputational risk: public confidence may be affected if supply disruptions occur

Feasibility and risk profile:

This option is operationally feasible because it continues the current approach; however, it maintains structural vulnerabilities and does not address the underlying problem statement. It is a "status quo" option that prioritizes short-term continuity over long-term sovereignty and resilience.

7.2 Option 2: Hybrid Model (Partial Local, Partial External):

Description:

Under this option, Afghanistan would adopt a staged or blended approach. Some components of banknote production would be performed domestically (e.g., secure storage, packaging, limited finishing, quality inspection, or smaller-scale printing), while core high-security printing and critical security features would remain outsourced. The hybrid model is often used as a transitional strategy when full domestic capability cannot be achieved immediately.

Possible hybrid configurations:

- **Configuration A:** External printing of banknote sheets, domestic finishing (cutting, packaging)

- **Configuration B:** Domestic printing of low-denomination or limited-use notes; high-denomination notes printed externally
- **Configuration C:** Domestic production of selected security components (e.g., numbering, tracking) while printing remains external
- **Configuration D:** Establish a domestic facility with limited initial capacity, gradually increasing production share over time

Advantages:

- Reduces dependency partially while avoiding full upfront investment initially
- Allows gradual development of local capacity through training and controlled technology transfer
- Enables testing of governance, security controls, and workforce readiness on a smaller scale
- Can improve lead times and responsiveness for selected banknote types or processes
- Creates a structured pathway toward full domestic production if designed properly

Disadvantages and limitations:

- Still requires significant investment in secure infrastructure, even if partial
- Complexity increases because two production models must be coordinated (external + internal)
- Security risks may remain high if key design and printing steps are still outsourced
- Potential inefficiency: duplicated processes, additional handoffs, and higher integration demands
- Vendor dependence remains: external printers still control core production schedule and sensitive security features
- Risk of "permanent hybrid": the country may remain stuck in partial capability without achieving full sovereignty
- Quality control challenges: ensuring consistent quality across split responsibilities can be difficult

Feasibility and risk profile:

This option is feasible and can be realistic if Afghanistan prefers a phased maturity path. However, the hybrid model may not fully achieve the strategic goals of sovereignty and security unless it is explicitly designed as a time-bound transition to full domestic production.

7.3 Option 3: Full Domestic Banknote Printing Facility (Preferred Option):

Description:

Under this option, Afghanistan establishes a fully operational, Central Bank–owned banknote printing facility capable of end-to-end production: printing, security feature integration, numbering, cutting, packaging, secure storage, quality assurance, and release processes—all managed domestically under Central Bank governance.

What this option includes:

- Design and construction of a high-security printing facility with restricted zones, vaults, and secure logistics areas
- Procurement and installation of banknote printing and finishing machinery
- Installation of IT systems for production tracking, ERP, inventory control, access management, and cybersecurity
- Development of SOPs, quality standards, security protocols, and audit mechanisms
- Recruitment and training of operators, engineers, IT specialists, quality inspectors, and security staff
- Testing, commissioning, trial printing, certification, and transition to operations

Advantages (long-term value):

- Achieves full monetary sovereignty over banknote production
- Strongest reduction in security and confidentiality risk (end-to-end control)
- Improves operational agility: faster response to demand, replacement cycles, and policy needs

- Long-term cost efficiency by reducing recurring external printing and logistics expenditures
- Builds high-value local capacity and institutional maturity
- Enables ongoing upgrades to anti-counterfeiting features through domestic control and continuous improvement
- Enhances public confidence due to stronger control and resilience

Disadvantages and challenges (realistic):

- Requires large upfront investment and multi-year implementation
- Requires strong governance and procurement discipline to manage complex vendor ecosystem
- Demands high-standard security, compliance, and workforce development programs
- Project risks are significant: integration, commissioning, and operational readiness must be carefully managed
- Requires sustainable operations funding and maintenance planning after commissioning

Feasibility and risk profile:

This option is feasible when supported by strong governance, PMO oversight, and structured procurement. While implementation is complex, it is the only option that fully addresses the problem statement and delivers long-term strategic independence.

7.4 Comparative Evaluation of Options:

Below is a structured comparison using consistent evaluation criteria. Ratings are qualitative for business case decision-making and can be converted into quantitative scoring if required.

Evaluation Criteria	Option 1: Outsource	Option 2: Hybrid	Option 3: Full Domestic
Strategic Sovereignty	Low	Medium	High
Security & Confidentiality Control	Medium	Medium–High	High
Operational Flexibility / Lead Time	Low–Medium	Medium	High

Evaluation Criteria	Option 1: Outsource	Option 2: Hybrid	Option 3: Full Domestic
Long-Term Cost Efficiency	Low	Medium	High
Upfront Capital Investment	Low	Medium	High
Implementation Complexity	Low	Medium–High	High
Technology & Workforce Development	Low	Medium	High
Dependency on External Entities	High	Medium	Low
Resilience to External Disruptions	Low	Medium	High
Alignment with Central Bank Mandate	Medium	High	Very High

Interpretation:

- Option 1 scores lowest on sovereignty, responsiveness, and long-term cost efficiency.
- Option 2 improves resilience and capacity but introduces coordination complexity and may not fully eliminate dependency.
- Option 3 delivers the strongest long-term value, security, and sovereignty, despite higher investment and complexity.

7.5 Selected Option and Justification

Selected Option:

Option 3: Full Domestic Banknote Printing Facility (Preferred Option)

Justification (business-case rationale):

Option 3 is selected because it is the only option that fully resolves the problem statement across all dimensions—financial, security, operational, and strategic. Afghanistan's long-term currency stability depends not only on continued access to banknotes, but on secure, timely, and sovereign control over their production. Outsourcing keeps Afghanistan exposed to high recurring costs, inflexible lead times, and confidentiality vulnerabilities. A hybrid model reduces some risks but still

retains core external dependency and may result in long-term structural inefficiency.

A full domestic facility aligns directly with the Central Bank's mandate and strengthens national monetary resilience. While the investment is substantial, it is justified as a strategic infrastructure capability that protects the integrity of Afghan banknotes, reduces long-term financial leakage through repeated outsourcing, and establishes a permanent institutional capability. Moreover, it enables the Central Bank to respond rapidly to economic conditions and to continuously strengthen anti-counterfeiting measures.

Decision Request:

Approval is requested to proceed with Option 3, including authorization to initiate detailed feasibility confirmation, detailed planning, procurement strategy development, and phased implementation under strong governance and PMO oversight.

8. Scope of the Proposed Solution:

This section defines the proposed solution scope for Option 3: Full Domestic Banknote Printing Facility in Afghanistan. In PMI/PMP terms, this is a high-level solution scope for the Business Case (not the detailed project scope statement). It describes what the proposed investment will deliver, what capabilities must exist at go-live, and what is explicitly excluded to avoid scope creep and unrealistic expectations.

8.1 High-Level Scope Description:

The proposed solution is to establish a Central Bank–owned, secure, and internationally compliant banknote production capability within Afghanistan, consisting of a purpose-built facility, specialized security printing machinery, supporting IT and security systems, and an operational organization capable of producing Afghan banknotes end-to-end.

At a high level, the solution includes the following integrated components:

1. **Facility (Secure Infrastructure)**
    - A high-security industrial facility designed specifically for security printing operations
    - Segregated functional zones with layered security (public/admin, controlled operations, restricted production, ultra-restricted vault areas)
    - Core utilities designed for continuous production: reliable power, redundancy, HVAC, fire protection, water management, and secure waste handling
    - Secure storage systems for raw materials, semi-finished stock, finished banknotes, and sensitive consumables
    - Secure loading/unloading bays and internal secure logistics pathways for movement of banknote materials
2. **Production Technology (Security Printing Capability)**
    - Procurement, installation, and commissioning of high-security banknote printing and finishing lines, including printing, numbering, cutting, inspection, and packaging

- Support equipment for secure handling of banknote paper, inks, plates, and consumables
- Quality assurance instruments, inspection systems, and rejection controls to ensure banknotes meet approved specifications

3. **IT, Security, and Production Governance Systems**

- Production planning and tracking systems (including inventory control and traceability)
- Secure IT infrastructure, cybersecurity controls, and access management aligned with high confidentiality requirements
- Physical security systems: access control, biometrics, CCTV monitoring, intrusion detection, perimeter security, and incident response tools
- Document and configuration management mechanisms to control designs, specifications, and security-feature information
- Audit trails and monitoring systems to enable internal audit and external assurance as required

4. **Operational Readiness and Institutional Capability**

- Development of operating procedures, maintenance procedures, quality protocols, security protocols, and governance controls
- Recruitment, training, certification, and structured knowledge transfer to develop competent local operational teams
- Testing and validation of end-to-end production, including trial printing and certification processes
- Handover to the Central Bank's operating organization with defined roles, responsibilities, and sustainable support arrangements

The solution is designed to provide Afghanistan with a long-term, resilient, and secure capability for producing Afghan banknotes within national jurisdiction, minimizing external dependence while maintaining international security printing standards.

8.2 Key Capabilities of the Facility:

To meet the Central Bank's needs and ensure operational sustainability, the facility must deliver the following key capabilities. These are expressed as capability

outcomes (what the facility must be able to do), rather than technical equipment descriptions.

A. End-to-End Banknote Production Capability

- Ability to produce banknotes domestically from controlled inputs through finished, packaged output
- Ability to plan production batches based on currency demand forecasts and replacement cycles
- Ability to handle multiple denominations with controlled production scheduling and reporting
- Ability to conduct trial runs, adjust production parameters, and stabilize quality over time

B. Banknote Quality Assurance and Control

- Ability to meet approved banknote quality standards for print precision, alignment, color consistency, numbering accuracy, and material integrity
- Inspection systems to detect defects and control rejections, rework, and waste
- Documented quality procedures, acceptance criteria, and quality reporting
- Independent verification and audit support for quality assurance and compliance

C. Anti-Counterfeiting and Security Feature Control

- Controlled management of security features used in Afghan banknotes (confidential designs, features, and production steps)
- Ability to upgrade or strengthen security features over time in response to emerging counterfeiting threats
- Strict control of sensitive consumables and production artifacts (plates, inks, dies, templates, digital files)
- Segregation of duties to prevent unauthorized modification, duplication, or access

D. Physical Security and Controlled Access

- Multi-layered physical security with restricted zones and role-based access control
- Continuous surveillance, monitoring, and incident response capability
- Secure storage and vault controls for raw materials and finished banknotes
- Secure internal logistics to prevent diversion, loss, or unauthorized movement of sensitive materials

E. Cybersecurity and Data Protection

- Secure IT environment aligned with confidentiality requirements of banknote production
- Access control for systems and data, with audit logs and monitoring
- Protection of design files, production records, and inventory data against intrusion and manipulation
- Cybersecurity testing, penetration testing, and continuous monitoring mechanisms

F. Secure Inventory Management and Traceability

- Inventory tracking for raw materials, consumables, work-in-progress, and finished banknotes
- Traceability controls that support accountability and audit requirements
- Reconciliation processes to validate production output versus materials usage
- Secure disposal processes for waste and rejected materials

G. Maintenance, Reliability, and Continuity of Operations

- Preventive and corrective maintenance capability for machinery and security systems
- Spare parts planning and maintenance schedules to prevent prolonged downtime
- Redundancy planning for critical utilities to ensure continuous operations
- Vendor support and service arrangements to maintain operational readiness

H. Workforce Competency and Institutional Readiness

- Trained and certified operators, maintenance technicians, quality inspectors, IT security specialists, and security personnel

- Structured training programs, competency testing, and controlled knowledge transfer
- Governance-supported operating model including SOPs, compliance, and audit readiness
- Clear handover model and ownership by the Central Bank operating entity

8.3 In-Scope and Out-of-Scope Elements:

This section clarifies boundaries to prevent scope creep and ensure realistic expectations.

In Scope (Included):

Facility and Infrastructure:

- Site development, secure facility design, construction, and commissioning
- Utilities including power (with redundancy), HVAC, fire protection, water and waste management
- Secure zoning, vaults, restricted areas, and controlled movement pathways
- Secure storage for raw materials and finished banknotes

Production Technology:

- Procurement, delivery, installation, and commissioning of printing and finishing machinery
- Inspection and quality assurance equipment
- Secure material handling systems and controlled storage for consumables

Security and IT:

- Physical security systems: access control, biometrics, CCTV, intrusion detection, perimeter security
- Cybersecurity architecture and controls
- Production planning and tracking systems, inventory management, and audit logs
- Document control and configuration management for sensitive information

Operational Readiness:

- SOPs for production, security, quality, inventory, and maintenance
- Training and certification programs for operational staff

- Trial production, certification testing, and operational readiness assessments
- Handover to Central Bank operations, including governance and PMO transition requirements

Governance, Compliance, and Assurance:

- Governance framework implementation including PMO assurance, stage gates, and change control
- Internal audit readiness and compliance reporting mechanisms
- Vendor governance, performance monitoring, and contractual controls

Out of Scope (Excluded):

To maintain clear boundaries, the following are explicitly excluded from the project scope:

- Redesign of Afghan banknotes beyond what is required for production readiness (unless separately authorized)
- National cash distribution network redesign (e.g., transportation and distribution outside the facility boundary)
- Long-term operational funding after handover (treated as operational budget, not project budget)
- Broader modernization of the banking sector or national payment digitization programs
- Production of non-banknote security items (e.g., passports, stamps, or other documents) unless authorized through a separate business case and scope baseline
- Any expansion of capacity beyond the initial approved production capability without approved change control and updated business justification

9. Feasibility Analysis:

This feasibility analysis evaluates whether Afghanistan can realistically implement and sustain a full domestic banknote printing and secure production facility under the leadership of the Central Bank of Afghanistan. In PMI/PMP terms, feasibility is not only "can we build it?"—it is also "can we operate it safely, afford it over time, govern it correctly, and deliver benefits reliably?" The analysis is structured into five feasibility dimensions: technical, operational, financial, security/confidentiality, and organizational/human resources.

9.1 Technical Feasibility:

Technical feasibility assesses whether the required technology, infrastructure, and integration can be delivered to a stable, operational state within acceptable risk.

a) Facility and Infrastructure Feasibility:

A banknote facility is technically feasible in Afghanistan if the design incorporates:

- **Industrial-grade construction** suitable for precision printing operations (vibration control, controlled environmental conditions, secure zoning)
- **High reliability utilities**, particularly:
    - Continuous electrical power with redundancy (primary power + backup generation + UPS for critical loads)
    - HVAC systems for temperature/humidity stability needed for printing quality and material preservation
    - Fire safety systems designed for sensitive materials and restricted areas
- **Controlled internal logistics** for movement of banknote paper, inks, plates, and finished notes

This is feasible using modern industrial design and construction practices, provided that the project includes early design validation and rigorous quality controls.

b) Machinery and Production Technology Feasibility:

Modern banknote production lines are commercially available from specialized global vendors. The technology typically includes:

- Security printing presses and finishing systems (numbering, cutting, packaging)
- Inspection and defect detection systems
- Calibration tools and quality measurement instruments

Technically, procurement and installation are feasible. However, the project must treat technology acquisition as a system—machines must integrate with facility environment, training, maintenance, and security controls. Feasibility is high if the project includes:

- Factory Acceptance Tests (FAT) prior to shipment
- Site Acceptance Tests (SAT) after installation
- Commissioning plans, trial runs, and controlled ramp-up to full capacity

c) Systems Integration Feasibility (IT + Production + Security):

Feasibility depends heavily on integration across:

- Production planning and tracking systems
- Inventory and traceability controls
- Access control, surveillance, and monitoring systems
- Cybersecurity controls and audit logs

Integration is feasible if the project adopts:

- A defined architecture early in design (target systems and interfaces)
- Clear data ownership and access rules
- Testing plans for integrated performance (not just component testing)

Conclusion (Technical):

Technically feasible, with moderate-to-high complexity. Strong feasibility requires disciplined system engineering, early design freeze, vendor integration planning, and staged commissioning.

9.2 Operational Feasibility:

Operational feasibility assesses whether the Central Bank can operate the facility reliably, safely, and continuously once it is built.

a) Operating Model Feasibility

Domestic production is operationally feasible if the Central Bank establishes:

- A dedicated operations unit responsible for production planning, execution, and reporting
- Maintenance teams for machinery, utilities, and security systems
- Quality management functions with clear acceptance criteria and inspection methods
- A secure logistics function inside the facility for materials movement and storage

A realistic approach is to implement operations through a phased operational readiness plan:

- Early SOP development
- Training and certification
- Trial production
- Controlled ramp-up to stable output

b) Maintenance and Continuity Feasibility

Banknote production machinery is high-precision. Operational feasibility depends on:

- Preventive maintenance schedules and discipline
- Spare parts strategy (critical spares, lead time management)
- Vendor support arrangements for technical troubleshooting
- Redundancy in critical utilities to avoid production stoppage

Without a maintenance strategy and supplier support, operational feasibility weakens. With a structured plan, feasibility is strong.

c) Quality and Process Control Feasibility:

Operational success requires consistent banknote quality and defect control. This is feasible if:

- Environmental controls (temperature/humidity) are stable
- Calibration routines are implemented and audited
- Quality inspections are embedded in the process
- Rejection, rework, and waste are tracked with accountability

Conclusion (Operational):

Operational feasibility is achievable but depends on a mature operating model,

reliable maintenance approach, and strong quality management systems implemented before go-live.

9.3 Financial Feasibility:

Financial feasibility assesses whether the investment is affordable, sustainable, and economically justified for Afghanistan over its lifecycle.

a) Capital Expenditure (CAPEX) Feasibility

A domestic facility requires major upfront investment in:

- Secure facility construction
- Printing machinery and finishing equipment
- IT systems and cybersecurity
- Physical security infrastructure
- Training and commissioning

This is financially feasible if funding is structured as a multi-year capital program with strict governance and controlled releases tied to stage gates. The project's high-level budget estimate provides a reasonable basis for a phased investment approach.

b) Operating Expenditure (OPEX) Feasibility

OPEX includes:

- Skilled salaries and workforce costs
- Consumables (paper, inks, maintenance parts)
- Security operations and cybersecurity monitoring
- Utilities and facility upkeep
- Vendor servicing contracts

Financial feasibility improves if the Central Bank plans OPEX early and links it to production volumes and lifecycle replacement of equipment.

c) Economic Comparison Against Outsourcing

Outsourcing creates recurring external payments and logistics costs. Domestic production shifts spending toward internal costs while reducing:

- International transport and insurance expenses
- Emergency printing premiums

- Contract dependency costs
- Foreign exchange exposure

A full financial model (to be presented in Section 10) is required to confirm ROI and payback, but feasibility is supported by the principle that long-term recurring outsourcing costs can be reduced through domestic capability—especially when security and responsiveness are factored into the value equation.

Conclusion (Financial):
Financially feasible if funding is phased, governance controls are strong, and OPEX sustainability is built into the operating model; a detailed cost-benefit model is required to confirm ROI and payback period.

9.4 Security and Confidentiality Feasibility:

This dimension is central because banknote production involves national-level confidentiality and anti-counterfeiting controls.

a) Physical Security Feasibility

Security feasibility requires:

- Layered security zones (admin → controlled → restricted → ultra-restricted)
- Perimeter protection, CCTV, intrusion detection
- Role-based access control and biometrics
- Controlled vault management and dual authorization
- Secure internal movement controls and reconciliation procedures

These are technically and operationally feasible in Afghanistan, but only if security requirements are treated as core design criteria, not add-ons.

b) Confidentiality and Information Control Feasibility

Banknote production includes highly sensitive information. Feasibility depends on:

- Information classification rules (restricted handling)
- Controlled access to design files and security features
- Document configuration management (version control, approvals, audit trails)
- Background screening and strict segregation of duties

c) Cybersecurity Feasibility

Cybersecurity feasibility requires:

- Secure network segmentation
- Protected production systems and controlled interfaces
- Continuous monitoring and audit logging
- Penetration testing and remediation before go-live
- Policies controlling the use of tools and external data sharing

Conclusion (Security & Confidentiality):
Feasible, but high-risk if not governed rigorously. Security feasibility is strong when requirements are embedded into facility design, operating model, SOPs, and continuous oversight.

9.5 Organizational and Human Resource Feasibility:

This evaluates whether Afghanistan, through the Central Bank, can develop and sustain the governance, skills, and staffing needed to run the facility.

a) Governance and PMO Feasibility

A project of this scale requires robust governance. Feasibility is strengthened by:

- A clear Sponsor and Steering Committee decision structure
- A PMO with standards, assurance, reporting, and change control
- Stage-gate governance and independent reviews
- Procurement governance and segregation of duties

With these mechanisms in place (as already designed in the Governance Framework), organizational feasibility is high.

b) Workforce Availability and Training Feasibility

The facility needs specialized roles:

- Printing machine operators
- Electrical/mechanical maintenance technicians
- Quality inspectors and lab/testing staff
- IT administrators and cybersecurity specialists
- Security personnel trained for high-sensitivity environments

Feasibility depends on a structured capability-building plan:

- Vendor-supported training programs
- Certification and competency testing
- Long-term retention plan and career pathways
- Knowledge transfer requirements in vendor contracts

c) Change Management Feasibility

Transitioning from outsourcing to domestic production is a major institutional shift. Feasibility requires:

- Operational readiness planning
- Early involvement of operations stakeholders
- SOP development and rehearsals
- Governance-driven handover criteria

Conclusion (Organizational & HR):
Feasible with deliberate capacity building and structured knowledge transfer. The primary feasibility risk is not "availability of people," but the time required to develop competence and operational maturity.

Overall Feasibility Conclusion (Executive Feasibility Statement)

Establishing a full domestic banknote printing facility in Afghanistan is **feasible** across technical, operational, financial, security, and organizational dimensions, provided that the Central Bank implements a phased approach with strong governance and PMO oversight, embeds security-by-design, ensures disciplined procurement and system integration, and prioritizes workforce development and operational readiness prior to commissioning.

10. Cost–Benefit Analysis:

This section evaluates the economic justification of establishing a full domestic banknote printing facility in Afghanistan by comparing the total lifecycle costs and benefits of domestic production versus continued external outsourcing. In PMI/PMP terms, this analysis supports the investment decision, not the project execution budget, and therefore considers both quantitative and qualitative value drivers over the long term.

10.1 Capital Investment Costs:

The establishment of a domestic banknote printing facility requires a one-time, multi-year capital investment. These costs are incurred primarily during project implementation and are intended to create a long-term national capability.

Major capital cost components include:

1. **Facility Design and Construction**

- Secure, purpose-built industrial facility
- Restricted zones, vaults, controlled logistics areas
- Power infrastructure with redundancy
- HVAC systems for precision printing
- Fire protection and environmental controls

2. **Printing and Finishing Machinery**

- High-security banknote printing presses
- Numbering, cutting, inspection, and packaging lines
- Calibration and quality testing equipment
- Initial spare parts and tooling

3. **Security Systems**

- Physical security (perimeter, access control, biometrics, CCTV)
- Secure vault systems and internal movement controls
- Incident detection and response infrastructure

4. **IT and Cybersecurity Systems**

- Production planning and tracking systems
- Inventory and traceability systems

- Secure network infrastructure and cybersecurity controls
- Audit logs and compliance monitoring tools

5. **Training, Commissioning, and Knowledge Transfer**

- Operator and maintenance training programs
- Security and quality training
- Trial production and certification costs
- Vendor-supported commissioning activities

6. **Contingency and Risk Allowances**

- Management and contingency reserves for high-risk components
- Allowances for design refinement and integration risks

While the capital investment is significant, it creates a durable national asset with a useful life measured in decades rather than years.

10.2 Operating Cost Comparison (Domestic vs External Printing):

Operating costs differ substantially between domestic production and external outsourcing models.

A. External Printing (Current Model – Ongoing Costs)

Recurring costs include:

- Printing fees charged by foreign security printers
- International transport and secure logistics
- Insurance for high-value shipments
- Emergency printing premiums
- Contract management and oversight
- Foreign currency exposure and exchange rate volatility

These costs recur every printing cycle and tend to increase over time due to inflation, security premiums, and logistical complexity.

B. Domestic Printing (Proposed Model – Ongoing Costs)

Domestic operating costs include:

- Salaries for skilled operators, technicians, IT and security staff
- Consumables (banknote paper, inks, maintenance materials)

- Utilities and facility maintenance
- Security operations and cybersecurity monitoring
- Equipment servicing and spare parts

While domestic OPEX is continuous, it is more predictable and controllable and largely denominated in local costs, reducing exposure to foreign exchange risk.

Key comparison insight:

External printing converts all costs into recurring external payments, whereas domestic production converts a portion of these costs into internal operating expenses supported by an initial capital investment.

10.3 Quantitative Benefits (Cost Savings and Efficiency):

Quantitative benefits are those that can be measured directly in financial or operational terms.

Key quantitative benefits include:

- **Reduction in long-term printing costs:** Over time, the per-unit cost of domestically printed banknotes decreases compared to outsourced production.
- **Elimination of international logistics costs:** Domestic production removes recurring expenses for transportation, insurance, and secure handling across borders.
- **Reduced emergency printing premiums:** Faster response capability reduces the need for costly urgent orders.
- **Lower foreign exchange exposure:** Domestic operations significantly reduce payments in foreign currency, improving budget stability.
- **Improved production lead times:** Shorter lead times improve cash planning, inventory management, and circulation efficiency.
- **Reduced waste and reprinting:** Direct control over quality and production parameters reduces rejection rates and rework costs.

These quantitative benefits accumulate over the facility's operating life and are a key driver of financial justification.

10.4 Qualitative Benefits (Security, Sovereignty, and Control):

Certain benefits, while not easily expressed in monetary terms, are critical to the investment decision.

Key qualitative benefits include:

- **Enhanced national security:** Full control over banknote production significantly reduces confidentiality and counterfeiting risks.
- **Monetary sovereignty:** Afghanistan gains independent control over the production of its national currency.
- **Operational resilience:** Domestic production reduces vulnerability to external disruptions, geopolitical constraints, or supply chain shocks.
- **Improved governance and oversight:** Central Bank–controlled operations strengthen accountability, auditability, and compliance.
- **Institutional capacity building:** Development of advanced technical, security, and operational expertise within the country.
- **Public confidence:** Stronger control over banknotes enhances trust in the national currency and financial system.

From a PMI perspective, these qualitative benefits are often decisive in public-sector and sovereign investments, even when financial returns alone might not justify the project.

10.5 Return on Investment (ROI) and Payback Period:

The Return on Investment (ROI) for this project should be assessed over a long-term horizon, recognizing that banknote production infrastructure is a strategic asset rather than a short-term commercial venture.

ROI Considerations

- Initial capital costs are high, but recurring outsourcing costs are avoided over time.
- Financial ROI improves as cumulative savings from reduced outsourcing exceed the capital investment.
- Non-financial returns (security, sovereignty, resilience) significantly enhance overall value.

Payback Period

- The payback period depends on:
    - Annual volume of banknotes produced
    - Cost differential between domestic and external printing
    - Stability of operating costs
- While payback may not be immediate, it is reasonable over the medium to long term, particularly when emergency printing and risk mitigation costs are included.

Cost–Benefit Conclusion:

The cost–benefit analysis demonstrates that, although the proposed domestic banknote printing facility requires substantial upfront capital investment, it delivers significant long-term financial savings, enhanced operational efficiency, reduced security risks, and strategic benefits that cannot be achieved through continued outsourcing. When evaluated over the full lifecycle, the benefits—both quantitative and qualitative—justify the investment and support proceeding with implementation under strong governance and PMO oversight.

11. Risk Assessment and Mitigation:

This section identifies the principal risks associated with establishing a domestic banknote printing facility in Afghanistan and outlines how these risks can be mitigated through governance, planning, and operational controls. In PMI terms, this is a high-level business risk assessment, not a detailed project risk register.

11.1 High-Level Business Risks:

The most significant business risks relate to project complexity, long-term sustainability, and institutional readiness.

One key risk is implementation complexity. A banknote printing facility combines construction, advanced machinery, IT systems, security controls, and human capability development. Poor coordination across these elements could result in delays, cost overruns, or incomplete operational readiness. This risk is heightened in environments where similar facilities have not previously been operated domestically.

Another business risk is underestimation of time required for operational maturity. Even after construction and installation are complete, the facility requires a stabilization period during which quality, productivity, and reliability gradually improve. If this learning curve is not properly planned, the Central Bank may experience temporary dependence on external printing longer than anticipated.

There is also a risk related to long-term sustainability, particularly if operating budgets, maintenance funding, or workforce retention strategies are not adequately planned. Without sustained institutional commitment, the facility could become underutilized or operate below optimal efficiency.

Mitigation at business level:

These risks can be mitigated through phased implementation, realistic timelines, strong PMO oversight, stage-gate governance, early operational involvement, and long-term operating and maintenance planning embedded in the business case.

11.2 Security and Reputational Risks:

Security risks are among the most critical risks for banknote production in Afghanistan. Any breach, loss, or compromise related to banknote production

would have severe reputational consequences for the Central Bank and could undermine public confidence in the national currency.

Security risks include:

- Unauthorized access to restricted production areas
- Leakage of sensitive security-feature information
- Theft, diversion, or loss of materials or finished banknotes
- Cyber intrusion into production or inventory systems

In addition to direct security risks, reputational risk arises if the public or stakeholders perceive weaknesses in the Central Bank's ability to safeguard currency production. Even isolated incidents can have outsized impact on trust.

Mitigation at business level:

Security risks are mitigated by embedding security-by-design into the facility and operating model, implementing layered physical and cyber controls, enforcing segregation of duties, and establishing continuous monitoring and audit mechanisms. Strong governance, independent assurance, and zero-tolerance enforcement of security protocols are essential to maintaining reputational integrity.

11.3 Financial and Market Risks:

Financial risks relate to both investment affordability and long-term cost exposure.

Key financial risks include:

- Capital cost overruns during construction or equipment procurement
- Exchange-rate volatility affecting imported machinery and consumables
- Underestimation of operating costs, particularly maintenance and skilled staffing
- Delays in achieving cost savings compared to external printing

Market-related risks include changes in banknote demand due to:

- Shifts in cash usage patterns
- Inflationary or deflationary pressures
- Changes in denomination structures or circulation behavior

If these factors are not well understood, projected cost savings and payback timelines could be affected.

Mitigation at business level:

Financial risks are mitigated through conservative cost estimation, phased funding releases, contingency reserves, robust procurement strategies, and regular financial reviews. Market-related risks are mitigated by designing scalable production capacity and maintaining flexibility in production planning.

11.4 Risk Mitigation Strategy Overview:

At the business case level, risk mitigation relies on institutional controls rather than tactical responses. The overarching mitigation strategy includes:

- Strong sponsorship and executive oversight
- A dedicated PMO providing independent assurance
- Stage-gate decision points tied to readiness and risk reduction
- Clear accountability for security, finance, and operations
- Early identification and escalation of emerging risks

This approach ensures that risks are actively governed, not merely documented, and that corrective action can be taken before risks materialize into major issues.

12. Assumptions and Constraints:

This section documents the foundational assumptions and constraints that underpin the feasibility and justification of the proposed investment.

12.1 Key Business Assumptions:

The Business Case is based on several key assumptions that are considered reasonable at the time of analysis:

- The Central Bank of Afghanistan will retain its mandate to issue and manage national banknotes.
- Cash will remain a significant component of Afghanistan's economy for the foreseeable future.
- Funding for the project will be made available according to an approved multi-year investment plan.
- Qualified vendors for banknote printing technology and security systems are available and willing to engage.
- The Central Bank can recruit, train, and retain skilled personnel for secure printing operations.
- Regulatory and security requirements related to banknote production will remain broadly stable during implementation.

These assumptions form the basis for cost estimates, timelines, and benefit projections.

12.2 Key Constraints:

The project is subject to several non-negotiable constraints that shape the proposed solution:

- **Security constraints:** Strict confidentiality and access controls limit flexibility in design, staffing, and operations.
- **Budgetary constraints:** Capital and operating budgets must align with approved financial ceilings.
- **Time constraints:** Certain milestones (e.g., commissioning, replacement of unfit banknotes) may be time-sensitive.
- **Capacity constraints:** Initial production capacity may be limited during early operational phases.

- **Regulatory constraints:** Compliance with currency, audit, and procurement rules restricts procedural flexibility.

These constraints are inherent to the nature of banknote production and must be managed rather than eliminated.

12.3 Assumption Validation and Risk Conversion Approach:

Assumptions are not static. Throughout planning and implementation, assumptions must be **actively validated**. If evidence emerges that an assumption is no longer valid, it becomes a **"killed assumption"** and must be formally converted into a risk.

For example:

- If funding timelines change, the funding assumption becomes a financial risk.
- If skilled staff cannot be retained, the workforce assumption becomes an operational risk.
- If cash usage declines faster than expected, demand assumptions become market risks.

This disciplined conversion ensures transparency and allows risks to be managed proactively rather than implicitly embedded in plans.

13. Legal, Regulatory, and Compliance Considerations:

This section outlines the legal and regulatory environment governing banknote production in Afghanistan and the implications for the proposed facility.

13.1 Currency and Banknote Regulatory Framework:

The issuance and management of banknotes in Afghanistan are governed by laws and regulations that assign exclusive authority to the Central Bank. These frameworks define:

- The legal status of banknotes
- The authority to issue, replace, and withdraw currency
- Responsibilities for maintaining currency integrity and public confidence

A domestic banknote printing facility must operate fully within this legal framework, ensuring that all production activities are authorized, documented, and auditable.

13.2 Security, Audit, and Compliance Requirements:

Banknote production is subject to stringent security, audit, and compliance requirements, including:

- Physical security standards for restricted facilities
- Confidential handling of sensitive information
- Internal and external audit rights
- Traceability and reconciliation of materials and finished notes
- Compliance with financial control and anti-fraud measures

The proposed solution incorporates these requirements into facility design, operating procedures, and governance structures to ensure full compliance.

13.3 Procurement and Contractual Considerations:

Procurement of banknote printing machinery, security systems, and specialized services must comply with applicable procurement laws and Central Bank policies. Key considerations include:

- Transparent and competitive vendor selection
- Clear definition of technical, security, and performance requirements
- Strong contractual protections for confidentiality and intellectual property

- Defined obligations for training, knowledge transfer, and long-term support
- Performance-based payment and acceptance mechanisms

Careful procurement and contract management are essential to protect Afghanistan's interests and ensure that the facility delivers the intended long-term value.

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14. Implementation Overview:

14.1 High-Level Implementation Approach:

The implementation of the National Currency Printing and Secure Banknote Production Facility will follow a phased, stage-gated, and governance-driven approach consistent with PMI best practices for large, complex, high-security public-sector programs. Given the strategic sensitivity of banknote production in Afghanistan, implementation is designed to prioritize control, security, assurance, and readiness over speed, while still maintaining momentum and cost discipline.

The implementation approach begins with front-end definition and validation, ensuring that requirements related to security, compliance, quality, and operational readiness are fully understood before major capital commitments are released. This includes confirmation of production capacity needs, security classifications, regulatory requirements, and future operating model assumptions. Early emphasis is placed on integrated planning to avoid fragmented delivery across construction, machinery, IT, and security workstreams.

Execution is structured into clearly defined phases, each separated by formal stage-gate approvals. Progression from one phase to the next requires objective evidence of readiness rather than schedule pressure. This ensures that Afghanistan does not advance into high-risk stages without adequate controls, designs, and capacity in place.

A key feature of the approach is parallel but coordinated workstreams:

- Facility design and construction
- Procurement and installation of printing machinery
- IT systems and cybersecurity deployment
- Physical security systems
- Workforce training and operational readiness

These workstreams are integrated through a master schedule and controlled through the PMO to prevent misalignment or premature commissioning.

The implementation also adopts a progressive commissioning philosophy. Instead of a single “big bang” handover, systems and processes are tested incrementally—first individually, then in integrated scenarios, and finally through controlled trial

banknote production. This reduces operational risk and allows early detection of weaknesses.

Importantly, the approach embeds knowledge transfer and localization throughout implementation. Vendor contracts explicitly include training, documentation, mentoring, and certification requirements to ensure Afghan staff progressively assume full operational control.

Overall, the implementation approach balances technical rigor, security assurance, institutional capacity building, and financial discipline, ensuring that Afghanistan's investment results in a stable, sovereign, and sustainable banknote production capability rather than a fragile or vendor-dependent facility.

14.2 Governance and Oversight Model:

The implementation is governed through a multi-layered oversight structure designed to ensure accountability, transparency, and disciplined decision-making at all levels. Given the national importance of currency production in Afghanistan, governance is intentionally strong and formal.

At the top level, the Project Sponsor from the Central Bank provides strategic leadership and ensures alignment with monetary policy objectives and national financial stability. The Sponsor is accountable for securing funding, endorsing major decisions, and resolving escalations that exceed delegated authority.

A Steering Committee provides executive oversight. This body reviews progress at defined intervals, approves stage-gate transitions, resolves strategic trade-offs, and ensures that security, cost, and schedule remain balanced. Steering Committee decisions are evidence-based and supported by PMO assurance reports rather than informal updates.

The Project Management Office (PMO) plays a central role in governance. The PMO owns standards, controls, reporting cadence, and independent assurance. It ensures that plans are realistic, baselines are protected, changes are justified, and performance data is reliable. The PMO also serves as the institutional memory, ensuring continuity despite personnel changes.

Specialized governance bodies operate alongside the core structure:

- A **Security and Compliance Board** ensures that physical, cyber, and information security requirements are non-negotiable and embedded throughout implementation.
- A **Procurement and Commercial Board** governs vendor selection, contract performance, and dispute resolution.

The **Project Manager** is accountable for day-to-day delivery within approved baselines, coordinating workstreams, managing risks, and escalating issues through defined channels.

This governance model ensures that implementation decisions in Afghanistan are controlled, auditable, and aligned with national interests, while still enabling timely execution.

14.3 Role of the PMO and Central Bank:

The success of this initiative depends heavily on the institutional leadership of the Central Bank and the operational discipline of the PMO.

The Central Bank acts as both owner and future operator of the facility. During implementation, it defines policy requirements, security standards, and operational expectations. The Central Bank ensures that project outputs are not only delivered, but are fit for long-term use within its institutional framework.

The PMO, operating under the Central Bank, translates strategic intent into executable governance. Its responsibilities include:

- Establishing project management standards and templates
- Reviewing and approving integrated plans and baselines
- Providing independent assurance on schedule, cost, quality, and risk
- Enforcing change control discipline
- Coordinating reporting to senior leadership

The PMO also plays a critical role in benefits realization, ensuring that the project remains focused on business outcomes rather than just construction or equipment delivery.

Together, the Central Bank and PMO ensure that implementation in Afghanistan is institutionally anchored, not vendor-driven, and that national interests remain protected throughout the project lifecycle.

14.4 High-Level Timeline and Milestones:

The implementation timeline spans multiple years and reflects the complexity of establishing a secure banknote printing facility. Rather than focusing solely on speed, the timeline emphasizes readiness, assurance, and sustainability.

Key milestones include:

- Charter approval and governance mobilization
- Design approval and security validation
- Construction completion
- Machinery installation
- Integrated system testing
- Trial banknote production
- Operational handover and closure

Each milestone represents a decision point, not just a technical achievement. Advancement requires evidence that security, quality, and operational criteria are met.

This structured timeline ensures Afghanistan achieves a controlled transition from outsourcing to domestic production without risking currency integrity or public confidence.

15. Benefits Realization and Sustainability:

15.1 Benefits Realization Plan (High Level):

Benefits realization for this project is planned as a structured, long-term process, not a one-time post-completion activity. The Central Bank of Afghanistan recognizes that benefits from domestic banknote production—such as cost efficiency, security, and sovereignty—are realized progressively over time rather than immediately upon commissioning.

The benefits realization plan begins during implementation, with explicit linkage between project outputs and intended outcomes. For example, facility construction alone does not deliver benefits unless it enables secure production; similarly, machinery installation does not create value unless staff are trained and quality is stabilized. The PMO plays a key role in ensuring this linkage remains visible and measurable.

Benefits are grouped into:

- **Financial benefits** (reduced outsourcing costs, predictable expenditures)
- **Operational benefits** (shorter lead times, production flexibility)
- **Security benefits** (reduced exposure and confidentiality risks)
- **Institutional benefits** (capacity building, governance maturity)

Each benefit category is assigned an owner within the Central Bank, ensuring accountability beyond project closure. Benefits tracking continues during early operations, allowing corrective action if expected outcomes are not materializing.

15.2 Operational Sustainability:

Operational sustainability is central to the long-term success of domestic banknote production in Afghanistan. Sustainability depends on more than technical capability—it requires stable funding, skilled people, effective governance, and continuous improvement.

Key sustainability enablers include:

- A dedicated operational budget separate from project funding
- Preventive maintenance and spare parts planning
- Ongoing training and certification programs
- Strong security culture and compliance enforcement

- Continuous quality monitoring and improvement

The Central Bank must treat the facility as a strategic national asset, not merely an industrial plant. Sustainability planning ensures the facility remains effective, secure, and trusted for decades.

15.3 Long-Term Institutional Impact:

Beyond operational benefits, this project has significant long-term institutional impact for Afghanistan. It strengthens the Central Bank's authority, capability, and credibility as custodian of national currency.

The project contributes to:

- Enhanced institutional maturity in complex asset management
- Development of advanced technical and security expertise
- Improved governance practices transferable to other strategic initiatives
- Increased public confidence in national financial systems

This institutional impact represents a lasting return on investment that extends well beyond financial metrics.

16. Recommendation and Decision Request:

16.1 Summary of Business Case Justification:

The Business Case for establishing a domestic banknote printing facility in Afghanistan demonstrates a compelling and well-founded justification grounded in strategic necessity, economic rationale, operational feasibility, and long-term national interest. At its core, the initiative responds to a critical structural weakness in the current currency management model: Afghanistan's reliance on external banknote printing arrangements. While outsourcing has enabled continuity in the past, it exposes the country to persistent vulnerabilities that are no longer sustainable in light of evolving economic, security, and governance realities.

From a strategic perspective, domestic banknote production is essential to strengthening monetary sovereignty. Control over the design, production, timing, and volume of national banknotes is a fundamental function of a central bank. Continued dependence on external printers constrains Afghanistan's ability to respond rapidly to changes in currency demand, inflationary pressures, replacement of unfit notes, or emergency monetary interventions. A domestic facility restores full strategic control, enabling the Central Bank to act decisively and independently in support of financial stability and public confidence.

From an economic and financial standpoint, the business case shows that while the initial capital investment is significant, it is justified when evaluated over the full lifecycle of banknote production. External printing entails recurring costs, exposure to foreign exchange volatility, international logistics expenses, insurance premiums, and emergency surcharges for urgent orders. These costs accumulate indefinitely. In contrast, domestic production converts recurring external payments into a controlled operating model with predictable expenditures, reduced foreign currency exposure, and improved cost transparency. Over time, this shift delivers measurable savings and greater budgetary certainty for Afghanistan's monetary authorities.

From an operational perspective, the proposed solution is feasible and realistic. The business case confirms that the required technologies, expertise, and systems for secure banknote production are available and can be implemented through phased delivery, strong governance, and structured knowledge transfer. The

project roadmap, governance framework, and PMO oversight mechanisms ensure that complexity is managed systematically, risks are controlled, and readiness is verified before transitioning to live operations. This reduces the likelihood of operational disruption and ensures that the facility achieves stability and reliability before full-scale production.

From a security and risk management perspective, the justification is particularly strong. Banknote production is inherently sensitive. Outsourcing introduces unavoidable risks related to confidentiality, transport, third-party exposure, and information leakage. A domestic facility, designed with security-by-design principles, layered physical and cyber controls, and strict governance, significantly reduces these risks. This directly protects the integrity of Afghan banknotes and safeguards public trust in the national currency.

Finally, the business case demonstrates substantial institutional and long-term benefits. Beyond producing banknotes, the project strengthens institutional capacity, governance maturity, and technical expertise within Afghanistan. It creates a strategic national asset that supports resilience, continuity, and credibility of the financial system for decades.

In summary, the business case clearly establishes that continued outsourcing is increasingly costly, risky, and strategically limiting, while the proposed domestic banknote printing facility offers a comprehensive, sustainable, and value-driven solution aligned with Afghanistan's economic stability, security needs, and long-term national interests.

16.2 Recommended Investment Decision:

Based on the comprehensive analysis presented in this Business Case, it is formally recommended that the Central Bank approve the investment to establish a full domestic banknote printing and secure production facility and authorize progression to the next phases of detailed planning and procurement under the approved governance framework. This recommendation is grounded in a thorough evaluation of strategic, financial, operational, security, and institutional considerations and reflects a prudent, forward-looking investment decision aligned with national priorities.

Approving this investment represents a deliberate shift from short-term dependency to long-term capability building. While outsourcing banknote

production has historically ensured continuity, it no longer offers an optimal or resilient solution for Afghanistan's evolving monetary environment. Continued reliance on external printers exposes the Central Bank to uncontrollable variables, including cost volatility, extended lead times, confidentiality risks, and external disruptions. In contrast, a domestic facility provides stability, predictability, and direct control over one of the most critical instruments of monetary policy.

The recommended decision authorizes the Central Bank to move beyond conceptual justification into disciplined execution, beginning with detailed planning, design finalization, and procurement activities. These steps will be undertaken within a robust governance structure that includes a Steering Committee, an empowered Project Management Office (PMO), defined stage-gate approvals, and strict change-control mechanisms. This ensures that the investment is not only approved but is also protected through strong oversight and accountability throughout its lifecycle.

From a financial perspective, the recommendation recognizes that this initiative is a strategic capital investment rather than a routine expenditure. Although the upfront costs are substantial, the long-term financial benefits—such as reduced outsourcing expenses, minimized foreign exchange exposure, and predictable operating costs—justify the investment over the facility's lifecycle. The decision also reflects an understanding that certain benefits, particularly security, sovereignty, and institutional credibility, cannot be fully quantified yet are essential to national financial stability.

From an operational and security standpoint, approving the investment enables the Central Bank to implement a security-by-design model, embedding physical, digital, and procedural controls from the earliest stages. This proactive approach significantly reduces systemic risks associated with banknote production and strengthens public confidence in the national currency. The decision further enables structured knowledge transfer, workforce development, and operational readiness planning, ensuring that the facility can be sustainably operated by trained national personnel.

Importantly, this investment decision signals a long-term institutional commitment. It affirms the Central Bank's role as a capable, independent authority responsible for safeguarding monetary integrity and demonstrates confidence in

its ability to manage complex, high-security national projects through modern project management and governance practices.

In conclusion, approving the investment and authorizing progression to detailed planning and procurement is a strategically sound, economically responsible, and institutionally strengthening decision. It positions Afghanistan to secure its monetary future, reduce systemic risks, and build enduring national capacity in line with international best practices and PMI/PMP-aligned governance principles.

16.3 Next Steps and Authorization Request:

Approval is requested to:

- Endorse this Business Case
- Authorize funding for the next implementation phase
- Confirm governance and PMO authority
- Initiate detailed planning, procurement, and risk management activities

This authorization enables Afghanistan to move decisively toward secure, sovereign control of its national currency production.

17. Appendices:

The appendices provide supporting reference material for the Business Case of the National Currency Printing and Secure Banknote Production Facility Project (NCPBF). These annexes enhance transparency, support decision-making, and provide traceability for financial, risk, and terminology assumptions used throughout the document. While the appendices do not introduce new decisions, they provide structured evidence that underpins the recommended investment.

17.1 Financial Summary Tables:

The following financial summaries present high-level, consolidated views of the investment and operating cost structure. These tables are intended to support executive understanding and strategic approval; they are not a substitute for detailed financial models maintained by the Central Bank.

Table 17.1-A: Summary of Capital Investment (CAPEX)

Cost Category	Description	Estimated Share
Secure Facility Construction	Design, civil works, secure zoning, utilities, vaults	Major
Printing & Finishing Machinery	Printing presses, numbering, cutting, inspection systems	Major
IT & Cybersecurity Systems	Production tracking, inventory, access control, audit logs	Moderate
Physical Security Systems	Perimeter security, biometrics, CCTV, intrusion detection	Moderate
Training & Commissioning	Workforce training, testing, trial production	Moderate
Contingency & Reserves	Risk allowance for complexity and uncertainty	Essential

Financial Interpretation:

CAPEX is front-loaded and non-recurring, creating a long-term national asset. Investment releases are assumed to be **stage-gate controlled** to reduce financial exposure.

Table 17.1-B: Summary of Operating Costs (OPEX – Steady State)

Cost Category	Description
Workforce Costs	Operators, engineers, IT, security, quality staff
Consumables	Banknote paper, inks, maintenance materials
Utilities	Power, HVAC, water, waste handling
Maintenance	Preventive and corrective maintenance, spare parts
Security Operations	Physical and cyber monitoring
Vendor Support	Technical support and specialist services

Financial Interpretation:

Domestic OPEX is **predictable and controllable**, primarily internalized, and significantly reduces recurring external payments and foreign exchange exposure compared to outsourcing.

Table 17.1-C: Cost Comparison – External vs Domestic Production (Conceptual)

Cost Dimension	External Printing	Domestic Printing
Upfront Investment	Low	High
Recurring Costs	High	Moderate
Foreign Currency Exposure	High	Low
Emergency Premiums	Frequent	Minimal
Cost Predictability	Low	High

17.2 High-Level Risk Register:

This register summarizes key strategic and business-level risks identified in the Business Case. It does not replace the detailed project risk register managed during execution.

Table 17.2: High-Level Business Risk Register

Risk ID	Risk Description	Risk Category	Potential Impact	Mitigation Strategy
BR-01	Delay in facility construction	Schedule	Delayed operational readiness	Stage-gate control, contractor oversight
BR-02	Technology integration failure	Technical	Production instability	FAT/SAT, phased commissioning
BR-03	Security breach	Security	Severe reputational damage	Layered security, segregation of duties
BR-04	Cost overrun	Financial	Budget pressure	Contingency, PMO cost control
BR-05	Skilled staff shortage	HR	Reduced quality/performance	Training, retention planning
BR-06	Vendor non-performance	Commercial	Delays, quality issues	Performance-based contracts
BR-07	Cybersecurity incident	Cyber	Data compromise	Secure architecture, monitoring
BR-08	Slower-than-expected benefit realization	Strategic	ROI delay	Benefits tracking and adjustment

Risk Governance Note:

All risks are subject to continuous review, and any risk exceeding defined thresholds is escalated to the Steering Committee.

17.3 Glossary of Terms:

This glossary ensures consistent interpretation of key terms used throughout the Business Case and supports training and knowledge transfer.

Glossary:

- **Banknote Production Facility:** A secure industrial installation designed to produce national currency banknotes end-to-end.
- **Business Case:** A justification for an investment based on costs, benefits, risks, and strategic alignment.
- **CAPEX:** Capital Expenditure incurred to create long-term assets.

- **OPEX:** Operating Expenditure required to run and maintain operations.
- **Central Bank:** The authority responsible for currency issuance, monetary stability, and banknote integrity.
- **Governance:** The framework for decision-making, oversight, accountability, and control.
- **PMO (Project Management Office):** The entity responsible for standards, assurance, reporting, and governance support.
- **Stage Gate:** A formal decision point used to approve continuation to the next phase.
- **Security-by-Design:** An approach where security controls are embedded from the earliest design stages.
- **Operational Readiness:** The state at which systems, people, processes, and controls are prepared for live operations.
- **Benefits Realization:** The process of ensuring intended business benefits are achieved and sustained.
- **Assumption:** A factor believed to be true for planning purposes; if invalidated, it must be converted into a risk.
- **Risk:** An uncertain event that may positively or negatively affect objectives.
- **Killed Assumption:** An assumption that proves invalid and is formally reclassified as a risk.